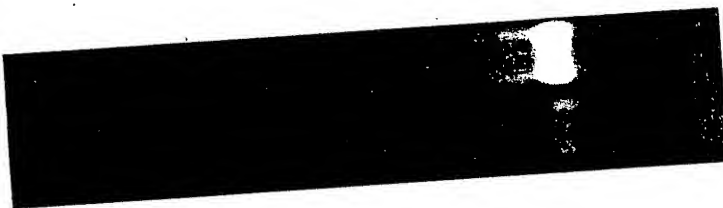


Figure 1.

Figure 2.

- PMSF, 5ul

+PMSF, 5ul



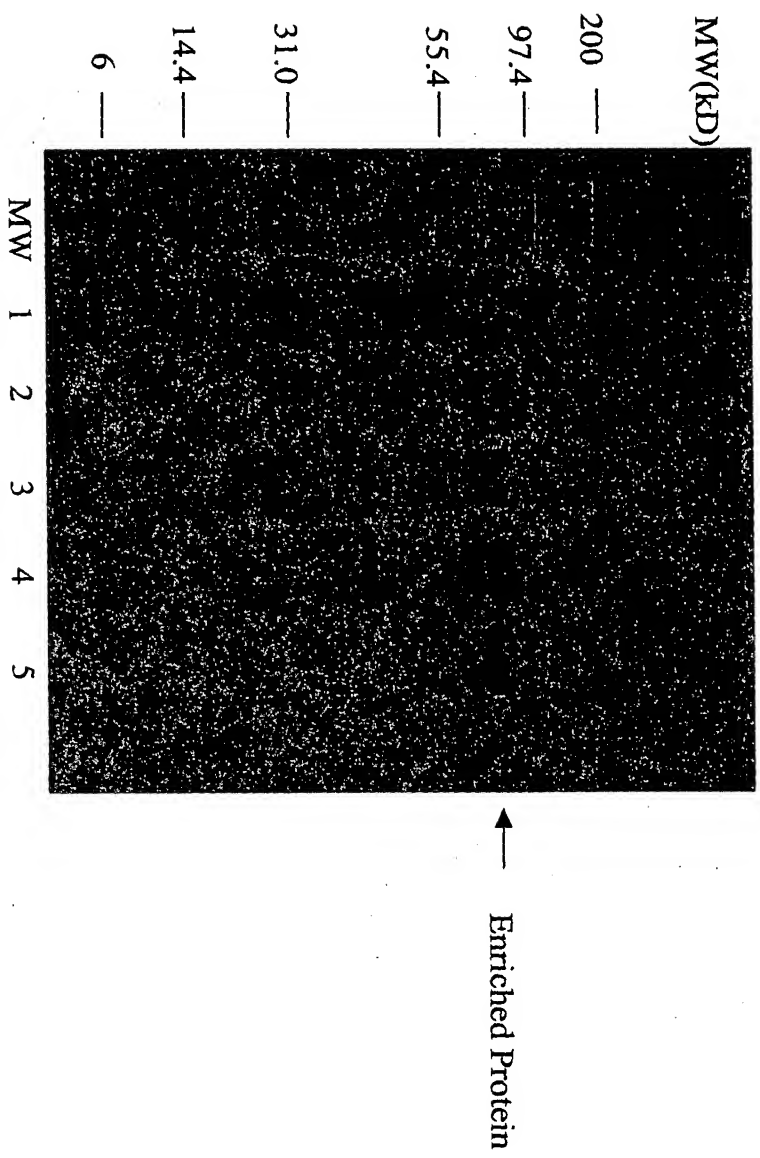


Figure 3.

Nicotianalisin
SEQID NO: 30

TTHTSQFLGL

Tomato

P69A	TTHTSSFLGL
P69B	TTHTPSFLGL
P69C	TTHTPSFLGL
P69D	TTHTPSFLGL
SBT1	TTRSPTFGL
SBT2	TTRSPFLGL
SBT3	TTHTSDFLKL
SBT4B	TTHTSDFLKL
SBT4	TTYTFGYLKL

Arabidopsis

Air3	TTRSWDFLGL
Ara12	TTRTPFLGL

Consensus

TT	FL L
----	------

Figure 4.

Relative activity, percent

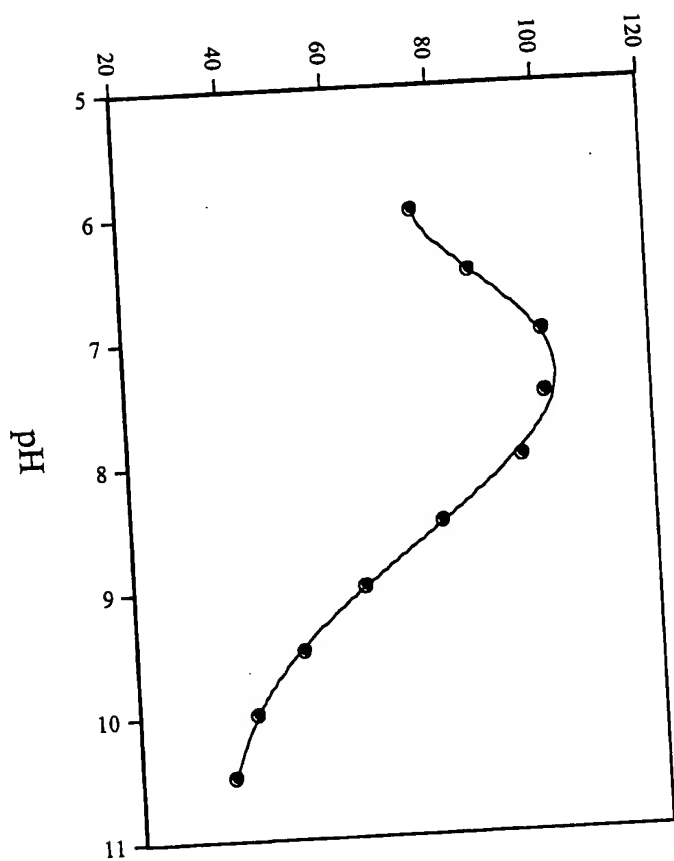


Figure 5.

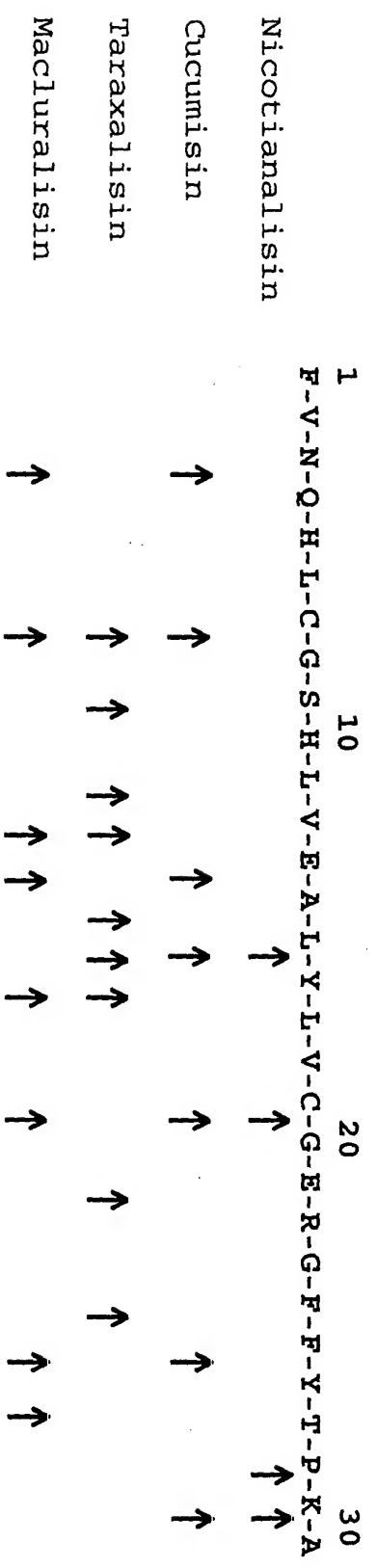


Figure 6.

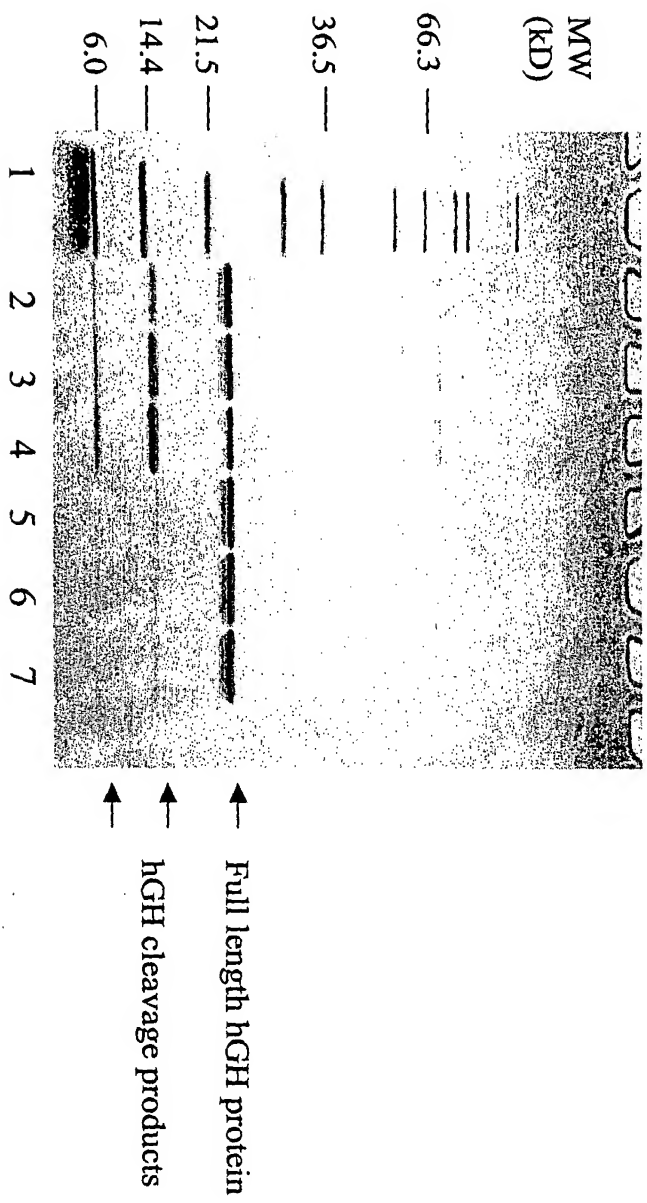


Figure 7.

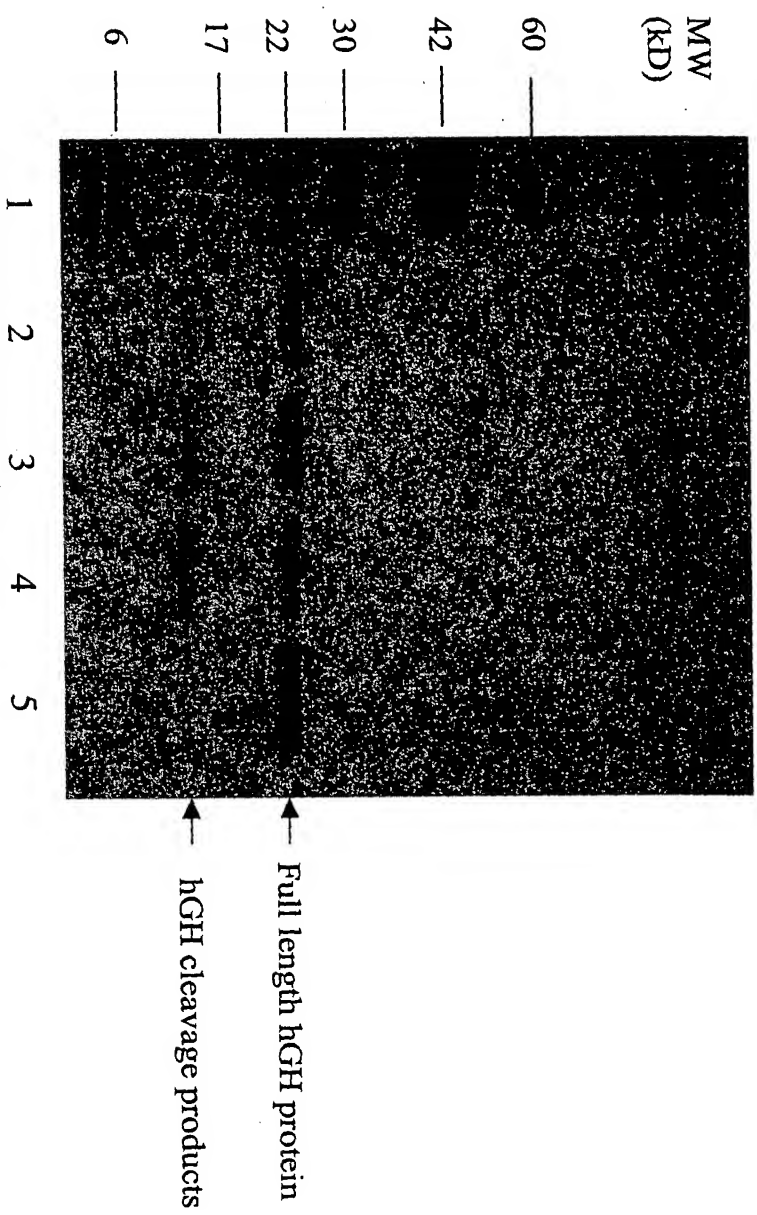


Figure 8.

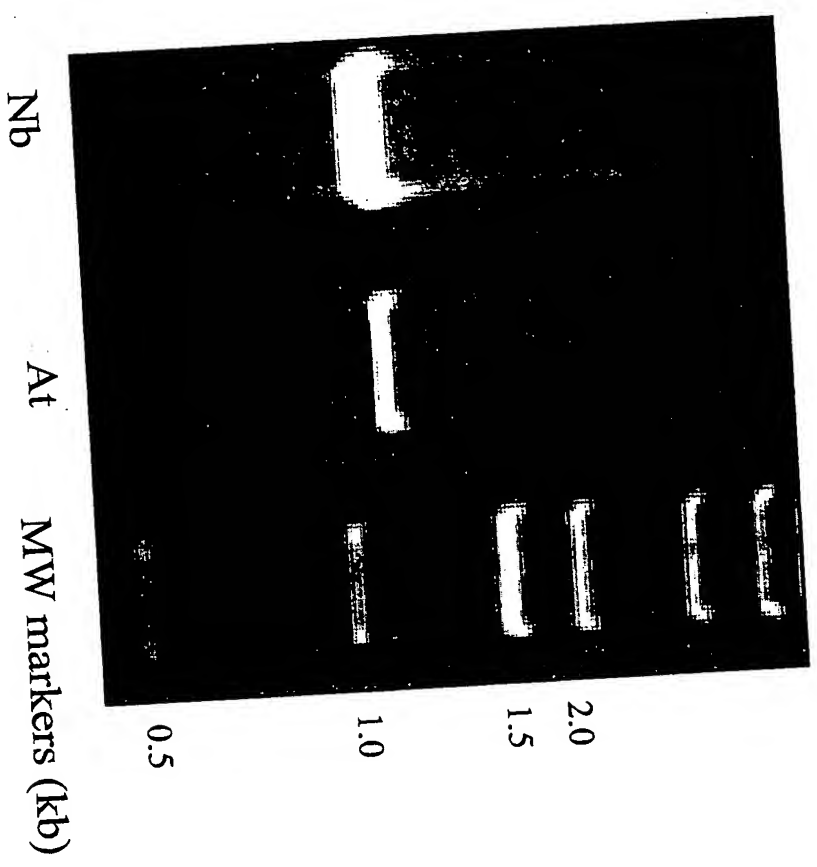


Figure 9.

Figure 10

	*		
Seq ID 24	GVIIGVIDTGIFPDHPSFSDVGMSPPPAKWKGFCEsnFTTKCNnKIIGLR	50	
Seq ID 25	GVIIGVIDTGivPDHPSFSDVGMppPPPAKWKGFCEsnFTTKrNNKlIGaR	50	
p69A (tomato)	GVIIGVIDTGILPDHPSFSDVGMppPPPAKWKGVCEsnFTnKCNNKlIGaR	50	
Consensus	gviigvidtgi pdhpsfsdvgm pppakwkg cesnft k nnk ig r		
	*		
Seq ID 24	SFRLSEDTPIDTDGHGHTHTASTAAGAFVKGANFFGNANGTAVGVAPLAHM	100	
Seq ID 25	SFpLdng.PIDenGHGHTHTASTAAGAFVKGANvFGNANGTAVGVAPLAHi	99	
p69A (tomato)	SyqLghgsPIDdDGHGHTHTASTAAGAFVnGANvFGNANGTAaGVAPfAHi	100	
Consensus	s l pid ghgthtastaagafv gan fgnangta gvap ah		
Seq ID 24	AIYKVC.SFATCSETDALAAMDAAIDDGVDIISASLGGFTNAPLHDDPIS	149	
Seq ID 25	AIYKVCgSdgvCSdveiLpAMDvAIDDGVDILSiSLGGtsN.PfHnDkIa	148	
p69A (tomato)	AvYKVCnSd.gCadTDvLAAMDAAIDDGVDILSiSLGGggssdfysnPia	149	
Consensus	a ykvc s c l amd aiddgvdi s slgg i		
	*		
Seq ID 24	LGAYSATEKGILASASAGNSE.FDNPVANNAPWILTVGASTHDRKLKATV	198	
Seq ID 25	LGAYSATeRGILvScSAGNSgpFqrtVnNdAPWILTVGASTHDRKLKATV	198	
p69A (tomato)	LGAYSATeRGILvScSAGNngpstgsVgNeAPWILTVGASTqDRKLKATV	199	
Consensus	lgaysate gil s sagn v n apwiltvgast drklkatv		
Seq ID 24	KLGNKEEFEGESADQPKTSNSTFIALFDAGKNASD...QDAPFCRSWAM	244	
Seq ID 25	KLGNKEEFEGESAyhPKTSsSTffLFDveK...DgtratrAPFCipgsl	245	
p69A (tomato)	KLGNrEEFEGESAyRPKiSNSTffALFDAGKNASD...efetPyCRSgsl	246	
Consensus	klgn eefegesa pk s stf lfd k d p c		
Seq ID 24	TDPAIKGKIVLCQKDPSSLTSSQGRNVKDAGGVGMILINNPEDGVTKSAT	294	
Seq ID 25	TDPsIrGKIVvClvgggvrTvdkGqvVKDAGGVGMILINNPEDGVTKSAe	295	
p69A (tomato)	TDPvIrGKIViClagggvprvdkGqaVKDAGGVGMiIINqgrsGVTKSAd	296	
Consensus	tdp i gkiv c g vkdagvgmi in gvtksa		
Seq ID 24	AHVLPALDVSHEEGEKIKAYINSTSNPIAAITFQGTVIGDKNAPIVASFS	344	
Seq ID 25	AHVLPALDVsdadGkKILAYINSTSNPvAAITFhGTvIGDKNAPIVASFS	345	
p69A (tomato)	AHViPALDisdadGtKILAYmNSTSNPvAtITFQGTiIGDKNAPIVAaFS	346	
Consensus	ahv pald s g ki ay nstsnp a itf gt gdknapiva fs		
	*		
Seq ID 24	ARGPSRANPGILKPDIIIGPGVNILAAWPTTVNIPNKNTNSGFNIISGTSM	394	
Seq ID 25	sRGPSeAsrGILKPDIIIGPGVNvLAAWPTsVdn.NKNTkStFNIISGTSM	394	
p69A (tomato)	sRGPSgAsiGILKPDIIIGPGVNILAAWPTsVdd.NKNTkStFNIISGTSM	395	
Consensus	rgps a gilkpdiigpgvn laawpt v nknt s fniisgtsm		
Seq ID 24	SCPH	398	
Seq ID 25	SCPH	395	
p69A (tomato)	SCPH	399	
Consensus	scph		

Figure 11

Seq_ID_40	.....	0
Seq_ID_39	.....	0
Seq_ID_25	.....	0
P69D	.....mgflkillififcsflrpsiqsdletyivhvespenqistqssltldesyy	51
P69A	.....mgflkillvfifcsfpwptiqsnletyivhvespeslistqssltddldsy	51
P69C	.....mgffkilvfifcsfpwptiqsdletyivhvespeslittqssltddldsy	51
P69B	.....mgllkillvfifcsfqwptiqsnletyivhvespeslvtqslldlgsyy	51
Seq_ID_24	.....	0
CUSSP	.....mssslifklffflffsnrlasrldsdgkniyivymgrkledpd	46
Seq_ID_19	.....	0
Seq_ID_18	.....ancitmyfllltillltlnpltmaesetyiihmdlsampkafsshqnwylttl	53
Seq_ID_20	.....	0
SBT4	..mgsrniwfpyspylvlfswalsahylaiaqrstyivhldkslmpnvftdhhwhssti	59
SBT3	.....mell.hlllffswalsahflalagrstyivhldkslmpnvftdhhwhssti	51
AG12	..mklyngiclpylflfasciclalhasstsmekstyivhmdkshmpkaftshhnwysiv	59
AIR3	.....mklthnfsfllllllvhmsskhilaskdsssyvvyfgahshvgeitedamdr	52
Seq_ID_21	.....vfpfffiisfcltpvtisvqsdghetfiihvsksdkprvftthhhwyssii	52
Seq_ID_22	....ptrpvfpfffiisfcltpvtisvqsdghetfiihvsksdkprvftthhhwyssii	56
Seq_ID_23	.....lssssssfliffllnsflvisvqlldghktfivhvskskhphifttrqhwysil	55
MDC16.21	maklslessiffvfp1llcfff.sp.sss.ssdglesyivhvqrshkpslfsshnnwhvsll	57
Seq_ID_27	marpgg.mvlstlflml.f...hvfvhaggnqkktiyiymdksnipadfdhtlwydssl	55
SBT1	merlrl.mfllilmvvl.f...hvfvdarqnqkktiyihmdkfnmpadfdhtqwydssl	55
ARA12	msssf1sstafflllclgfc..hvs.ssssdgg.tyivhmaksqmpssfdlhnwydssl	56
Seq_ID_26	.....h.....	1
SBT2	...magmllkcmfffvsvclainlakcsptnkktiyiqmdkwakpdvfdhvwyslv	56
Seq_ID_28	.....	0
F22M8.3	.....mffrsfivfffliffasnvsrkqtyihtvtsttkhi	38
Seq_ID_29	.....	0
Consensus	.....t i h.....s	60
Seq_ID_40	.....G.	1
Seq_ID_39	.....G.	1
Seq_ID_25	.....G.	1
P69D	lsflpktttaisssgdeeaas.miysyhnvmkgfaarltaaqvkemekkhgfvsaqkqri	110
P69A	lsflpktttaisssgneeaat.miysyhnvmtgfaarltaaqvkemekihgfvsaqkqrt	110
P69C	lsflpkttttisssgneeaat.miysyhnvmtgfaarltaaqvkemekkhgfvsaqkqri	110
P69B	lsflpkattisssgneeaat.miysyhnvmtgfaarltaaqvkemekkhgfvsaqkqri	110
Seq_ID_24	.....	0
CUSSP	sahlhramleqvvgstfapesvlhtykrsfngfavklteeeaeekiasmegvsvflnem	106
Seq_ID_19	.....	0
Seq_ID_18	asvsgssslgtesnrnsfsssklvaytnaihgfssatlspselqviknspgylsstkdm	113
Seq_ID_20	.....tprptrxptrpplrplspseykaiknslgyvssmedrt	38
SBT4	dsikasvps...svdrfhsapklvysydhvfhgfsavlskdelaalkkspgvisaykdr	116
SBT3	dsikasvps...svdrfhsapklvysydnvlhgfsavlskdelaalkklpgvisaykdr	108
AG12	dclnsekp.....ttssfytytnhvlhgfsaslsdqeldtlrespgfvsaydrn	109
AIR3	vkethydf1gsftgsreratdaifysytkhingfaahldhlayeiskhpdevsvfpnka	112
Seq_ID_21	rsvs.....qhpskilytyeraavgfsarltaaqadqlrripgvisvlpdev	99
Seq_ID_22	rsvs.....qhpskilytyeraavgfsarltaaqadqlrripgvisvlpdev	103
Seq_ID_23	rsvs.....qhsakilytyeraavgfsarltsgqadqlrrmpgvisvlpdev	105
MDC16.21	rlspssp.....q.patllysyravhgfsarlsptqtaalrrhpsvisvlpdqa	106
Seq_ID_27	ksvs.....kganmlytytnvihgystqltadeaksleqqpgilsvheevr	101
SBT1	ksvs.....ksanmlytytnvihgystqltadeakalaqqpgillvheevi	101
ARA12	rsis.....dsaellytyenaihgfstrltqeeadslmtqpgvisvlpdev	102
Seq_ID_26	.....	1
SBT2	ksvlpstte...vektgdgeerilysyqtafhgvaaglseevkklqerngvlavfpeik	113
Seq_ID_28	.....	0
F22M8.3	vtslfnslqtenindddflpeihiyenamsgfsatltddqldtvkntkgfisaypdel	98
Seq_ID_29	.....	0
Consensus	s.....y y.....g f a l.....g s	120

Seq_ID_40	.....VIIGVIDTGIVPDHP.SFSDVGMPPP	26
Seq_ID_39	.....VIIGVIDTGIVPDHP.SFSDVGMPPP	26
Seq_ID_25	.....VIIGVIDTGIVPDHP.SFSDVGMPPP	26
P69D	fslhtthtspflglqqnmgl....wkdsnfvgvVIIGVlDTGIlPDHP.SFSDVGMPPP	164
P69A	lsldtthtssflglqqnmgv....wkdsnygkgVIIGVIDTGIlPDHP.SFSDVGMPPP	164
P69C	lshtthtspflglqqnmgl....wkdsnygkgVIIGVIDTGIVPDHP.SlSDVGMPPsP	164
P69B	lshtthtspflglqqnmgv....wkdsnygkgVIIGVIDTGIlPDHP.SFSDVGMPPP	164
Seq_ID_24	.....gVIIGVIDTGIfPDHP.SFSDVGMsPP	26
CUSSP	nelhttrswdflglfpltvpr....r..sqvesnivvGVlDTGIwPesP.SFdDeGfsPP	158
Seq_ID_19	.....v.....stqsaitagDdGisev	17
Seq_ID_18	vkidgatescflglnsdsaga....wpksdygkdVivGlvDTGIwPesK.SynDnGMtev	167
Seq_ID_20	vkiththssflglssmygs....wpksnygkgVIIGVvDTGvWPeik.SFdDdGmsqv	92
SBT4	vepdtttytfgyklnpssyl....wpasglgqdmIIGVlDsGIwPesasfqdD.GiPei	170
SBT3	vephtthtsdflklnpssgl....wpasglgqdvIvaVlDsGIwPesasfqdD.GMPei	162
AG12	atldtthtprflslnptggl....wpasnygedVIIGVIDsGvWpesdsfkDdgmtaqv	164
AIR3	lklhttrswdflglehnsyvpsssiwrkarfgedtIIanlDTGvWpesK.SFrDeGlgPi	171
Seq_ID_21	rhlhtthtptflgla..dsf...glwpsndyaddVivGVlDTGIwPerP.SFSDeGlstv	153
Seq_ID_22	rhlhtthtptflgla..dsf...glwpsndyaddVivGVlDTGIwPerP.SFSDeGlstv	157
Seq_ID_23	rqhlthtptflgla..dsf...glwpsndyaddVivGVlDTGIwPerP.SFSDgGlsav	159
MDC16.21	reihthtapaflgfs..qns...glwpsnygedVivGVlDTGIwPeHP.SFSDsGlgPi	160
Seq_ID_27	yelhttrsptflglegresk...sflqlaetrseVIIGVlDTGvWpesK.SFdDtGlgPv	157
SBT1	yelhttrsptflglegresr...sffpqtarseVIIGVlDTGvWpesK.SFdDtGlgqv	157
ARA12	yelhttrtpflglld.elta...dlfpeagsysdVvvGVlDTGvWpesK.SySDeGfgPi	157
Seq_ID_26	.....	1
SBT2	yqlhttrspflglldredss...klwadrlsdhnVivGVlDTGIwPesP.SFnDsGMtsv	169
Seq_ID_28	.....	0
F22M8.3	lslhttsheflglefgig....lwnetslssdVIIGlvDTGIsPeH.vSFrDthMtPv	152
Seq_ID_29	0
Consensus	lhTt flgl w s viigv Dtgiwpe p sf d g	180

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Seq_ID_39	PAKWKGFCES...NFTTKCNKLIGARSFPLDNG.....PIDENGHGTH	67
Seq_ID_25	PAKWKGFCES...NFTTKrNNKLIGARSFPLDNG.....PIDENGHGTH	67
P69D	PAKWKGvCES...NFTTKCNKLIGARSyqLgNGs.....PIDdNGHGTH	206
P69A	PAKWKGvCES...NFTnKCNNKLIGARSyqLghGs.....PIDddGHGTH	206
P69C	PAKWKGvCES...NFTnKCNNKLIGARSyqLaNGs.....PIDddGHGTH	206
P69B	PAKWKGvCES...NFTnKCNNKLIGARSyqLgNGs.....PIDsiGHGTH	206
Seq_ID_24	PAKWKGFCES...NFTTKCNKliGIRSFrlsedt.....PIDtdGHGTH	68
CUSSP	PpKWKGtCet...snnfrCNrKiIGARSyhgripispg.....dvngPrDtNGHGTH	207
Seq_ID_19	PsrWKGGeCESgtefnsslCNkKLIGARyFnkgllannpn....lnismnssrDtdGHGTH	73
Seq_ID_18	PsrWKGGeCESgtqfnsslCNkKLIGARyFnkgliannpn....itismnsarDtdGHGTH	223
Seq_ID_20	PsrWKGiCqgtgtqfnsslCNkKLIGARyFnkgllskvkn....ltiminsarDteGHGTH	148
SBT4	PkrWKGiCnpgtqfnTsmCNrKLIGAnyFnkgllaedpn....lnismnsarDtNGHGTH	226
SBT3	PkrWKGiCkpgtqfnasmCNrKLIGAnyFnkgilandpt....vnitmnsarDtdGHGTH	218
AG12	ParWKGiCsr.egfnssmCNsKLIGARyFnngimaaipn....atfsmnsarDtlGHGTH	219
AIR3	PsrWKGiCqn.qkdaTfhCNrKLIGARyFnkgysaaavgh....lnsdfdsPrDldGHGsH	226
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Seq_ID_22	PssWKGkCvtgpdfeTsCNkKiIGAqmFykgyeahk.g.pmdeskesksPrDteGHGTH	215
Seq_ID_23	PsgWKGkCEtgldfpaTsCNrKiIGARlFykgyeadr.gspideskesksPrDteGHGTH	218
MDC16.21	PstWKGGeCEigpdpfpassCNrKLIGARaFyrgyltqrngtkkhaakesrsPrDteGHGTH	220
Seq_ID_27	PmsWKGGeCqigknfkassCNrKLIGARfFsqqyaaafga..idettesksPrDddGHGTH	215
SBT1	PasWKGkCqgtgknfdassCNrKLIGARfFsqqyaaafga..idetiesksPrDdeGHGTH	215
ARA12	PssWKGGeCagtnftaslCNrKLIGARfFargyestmmp..ideskesrsPrDddGHGTH	215
Seq_ID_26	.....	1
SBT2	PshWKGvCEtgrgfehhCskKivGARvFfrygaaasgk..inergefsksarDqdGHGTH	227
Seq_ID_28	.....	0
F22M8.3	PsrWrGsCdegtnfssseCNkKiIGAsaFykgyesivgkin..ettdfrstrDaqGHGTH	210
Seq_ID_29	.....	0
Consensus	p wkg ce g f cn kligar f g sprd gHgth	240

Seq_ID_40	TASTAAGAFVKGANVFGNANGTAVGVAPLAYIAIYKVCSDGV...CSDVEILAAMDVAI	124
Seq_ID_39	TASTAAGAFVKGANVFGNANGTAVGVAPLAYIAIYKVCSDGV...CSDVEILAAMDVAI	124
Seq_ID_25	TASTAAGAFVKGANVFGNANGTAVGVAPLAHIAIYKVCSDGV...CSDVEILpAMDVAI	124
P69D	TAgTAAGAFVKGVNiFGNANGTAVGVAPLAHIAvYKVCsSDGg...CSDsdILAAMDaAI	263
P69A	TASTAAGAFVnGANVFGNANGTAAGVAPfAhIAvYKVCnSDG...CaDtdvLAAMDaAI	262
P69C	TASTAAGAFVnGANVFGNANGTAVGVAPLAHIAIYKVCsSDG...CSDsdILAAMDaAI	262
P69B	TASTAAGAFVKGANVGNAdGTAVGVAPLAHIAIYKVCnSVg...CSesdvLAAMDsAI	262
Seq_ID_24	TASTAAGAFVKGANfFGNANGTAVGVAPLAHmAiYKVCsfat...CSetdaLAAMDaAI	124
CUSSP	TASTAAGglVsqaNlyGlgLTARgGvPLARIAaYKVCwnDG...CSDtdILAAYdDAI	263
Seq_ID_19	TsSTAAGsyVeGAsyFGyAGGALGfAPKAhvAmYKalwe.eg...vylsdvLAAIdQAI	129
Seq_ID_18	TsSTAAGshVesAsyFGyArGsAtGmAPKAhvAmYKalwe.eg...tmlsdILAAdQAI	279
Seq_ID_20	TsSTAAGslVKGAsyFGyApGfAiGVAPmAhvAvYKalwdgag...t.isdILAAdQAI	204
SBT4	sASIAAGnFaKGvshFGyAQGTARGVAPqARIAvYKfsfr.eg...sltsdILAAMDqAv	282
SBT3	cASitAGnFaKGvshFGyApGTARGVAPrARlAvYKfsfn.eg...tftsdILAAMDqAv	274
AG12	TASTAAGnyVnGAsyFGyGKTARGiAPrArvAvYKVtwp.eg...rytsdvLAGIdQAI	275
AIR3	TlSTAAGdFvPgVsiFGqgNGTAKGgsPrArvAaYKVCwppvkgneCyDadvLAAfDaAI	286
Seq_ID_21	TASTAAGslVanAsfyqyAkGeArGmAikARIAaYKiCwknG...CfnsdILAAMDqAv	267
Seq_ID_22	TASTAAGslVanAsfyqyAk...GmAikARIAaYKiCwknG...CfnsdILAAMDqAv	267
Seq_ID_23	TASTAAGsvVanAsfPqyAkGeArGmAikARIAaYKiCwktG...CfDsdILAAMDqAv	274
MDC16.21	TASTAAGsvVanAslyqyArgTATGmAskARIAaYKiCwtgG...CyDsdILAAMDqAv	276
Seq_ID_27	TAtTAAGsvVtGAslFGyAaGTARGmAshArvAaYKVCwagG...CfssdILAGMDQAv	271
SBT1	TAtTAAGsvVtGAslLGyAtGTARGmAshArvAaYKVCwtgG...CfssdILAGMDQAv	271
ARA12	TsSTAAGsvVeGAslLGyAsGTARGmAPrArvAvYKVCwlgG...CfssdILAAdKAI	271
Seq_ID_26	.....	1
SBT2	TAgTvAGsvVrGANllGyAyGTARGmAPgArvAaYKVCwvgG...CfssdILsAvDqAv	283
Seq_ID_28	.....	0
F22M8.3	TASTAAGdiVpkANYFGqAkGLAsGmrftsrIAaYKaCwalG...CastdviAAIdRAI	266
Seq_ID_29	.....	0
Consensus	tastaag v gas fgya gta g ap aria ykvcw g c sdilaamd ai	300

Seq_ID_40	DDGVDILSISLGG.TS.NPFHNDKIALGAYSATERGILVSCSAGNSGPFQRTVDNDAPWI	182
Seq_ID_39	DDGVDILSISLGG.TS.NPFHNDKIALGAYSATERGILVSCSAGNSGPFQRTVDNDAPWI	182
Seq_ID_25	DDGVDILSISLGG.TS.NPFHNDKIALGAYSATERGILVSCSAGNSGPFQRTVnNDAPWI	182
P69D	DDGVDILSISLGG.st.kPFHdDgIALGtYSATERGIFVSaSAGNSGPslgTVaNeAPWI	321
P69A	DDGVDILSISLGG.ggssdFysnpIALGAYSATERGILVSCSAGNnGPstgsVgNeAPWI	321
P69C	DDGVDILSISLGG.sp.iPlyeDsIAmGAYSATERGILVSCSAGNdGhsmgsVDNsAPWI	320
P69B	DDGVDILSISLGG.gp.iPFHrDnIAiGAYSATERGILVSCSAGNSGPsfITavNtAPWI	320
Seq_ID_24	DDGVDIIsaSLGG.ftnaPlHdDpIsLGAYSATEkGILaSaSAGNS.eFdnPvAnNAPWI	182
CUSSP	aDGVDIIsLsvGG.anprhyfvDaIAiGsfhAveRGILtSnSAGNgGPnfftaslsPWI	322
Seq_ID_19	tDGVDvLsLsLG..idaIPlHeDpvAiaAfaAleKGIfVStSAGNeGPpyeTlhnGtPWv	187
Seq_ID_18	eDGVDIIsLsLG..iddlalyeDpvAiatfaAmEkIdIfVStSAGNeGPddqalhnGtPWv	337
Seq_ID_20	aDGcDILSIsfGa.vSpfPlyiDpIsiasfSAMekGIfVSVsAGNeGPFdqslsNeAPWf	263
SBT4	aDGVDmISISfs..nrfiPlyeDaIsiasfGAmmkGvLVsSaSAGNrGhswgTVNgSPWI	340
SBT3	aDGVDmISISyG..yrfiPlyeDaIsiasfGAmmkGvLVsSaSAGNrGPgigslNngSPWI	332
AG12	aDGVDvisLsLG..ydgvpPlyeDpIAiasfaAmEkGvvVStSAGNaGPFfgnmhNgIPWv	333
AIR3	hDGaDvisVSLGG.ep.tsFfNDsvAiGsfhAakkrIvVvCSAGNSGPadsTVsNvAPWq	344
Seq_ID_21	DDGVhvisLsvGangyaphylyDsIAiGafgAsEhGvLVSCSAGNSGPgayTavNiAPWm	327
Seq_ID_22	DDGVhvisLsvGangyaphylyDsIAiGafgAsEhGvLVSCSAGNSGPgayTavNiAPWm	327
Seq_ID_23	aDGVhvisLsvGadgyapeydaDsIAiGafgAsEhGvvVSCSAGNSGPgasTavNvAPWI	334
MDC16.21	aDGVhvisLsvGasgSapeyHtDsIAiGafgATrhGivVSCSAGNSGPnpeTatNiAPWI	336
Seq_ID_27	iDGvNvLsLsLG..gtisdyrDivAiGfSAasqGIfVSCSAGNgGPgsgslsNaAPWI	329
SBT1	iDGvNvLsLsLG..gtisdyrDivAiGfSAasqGIfVSCSAGNgGPsgTlsNvAPWI	329
ARA12	aDnVnvLsLsLG..ggmsdyrDgVaiGafAaMERGILVSCSAGNaGPssslsNvAPWI	329
Seq_ID_26	.....	1
SBT2	aDGvNlLSISLGG..ggvssynrDslsiaAfgAmEkGvfVSCSAGNgGdpisltNvsPWI	341
Seq_ID_28	.....	0
F22M8.3	lDGVDvisLsLGG..SsrPFyVdPIaiagfgAmqknIfVSCSAGNSGPtasTVsNgAPWl	324
Seq_ID_29	.....	0
Consensus	dgvd s slg d iaigaf a e gi vscsagn gp t n apwi	360

Seq_ID_40	LTVGASTHDRKLKATVKLGNGKEEFEGE...SAYHPKTSNSTFFTLFDVEKIVHEQPVPAPF	239
Seq_ID_39	LTVGASTHDRKLKATVKLGNGKEEFEGE...SAYHPKTSNSTFFTLFDVEKIVHEQPVPAPF	239
Seq_ID_25	LTVGASTHDRKLKATVKLGNGKEEFEGE...SAYHPKTSNSTFFTLFDVEKdgratrAPF	239
P69D	LTVGASTHDRKLKvTVKLGNSKEEFEGE...SAYHPKTSNSTFFpLyDagKnesdQfsAPF	378
P69A	LTVGASTqDRKLKATVKLGNGKEEFEGE...SAYrPKiSNSTFFaLFDagKnasdefetPy	378
P69C	LTVGASTlDRKiKATVKLGNGKEEFqGE...SAYrPqiSNSTFFTLFDaaKnasdefktPy	377
P69B	LTVGASTlDRKiKATVKLGNGKEEFEGE...SAYrPKiSNSTFFTLFDaaKnakdpsetPy	377
Seq_ID_24	LTVGASTHDRKLKATVKLGNGKEEFEGE...SAdqPKTSNSTFiaLFDagKnasdQ.dAPF	238
CUSSP	LsVaASTmDRKfvtqVqiGNGqsFqGv...SintfdnqyyplvsgrDipntgfdkstarF	379
Seq_ID_19	LTVaAgTvDRefiGtltLGNGvsvpGl...SLYpgnsSsSesslvvyve.cqddke.....	238
Seq_ID_18	LTVaAgTvDRefiGtltLGNGvsvtGl...SLYpgnsSsSessivFlktcleeke.....	389
Seq_ID_20	LsVaASTvDRdviriltLGNGvsvtGl...SLYpgns.tSdisvilvkncldkqe.....	314
SBT4	LcVaAgftDRtfagTltLGNGlkiGw...SlfparafvrdFpviynktlscsdalls	397
SBT3	LcVasgftDRtfagTltLGNGlkiGw...Slfparafvrdspviynktlscsdalls	389
AG12	LTVaAgniDRsfagTltLGNDqtitGw...tmfpasaiiessqlvynktisacnstells	390
AIR3	iTVGASTmDRfasnlvLGNGkhyGqslsStalPhakfypimasvnakaknasaldAql	404
Seq_ID_21	LTVGASTiDRefpAdViLGdnriFgGvslySg..npltdaklpvvygdcg.....sky	379
Seq_ID_22	LTVGASTiDRefpAdViLGdnriFgGvslySg..npltdaklpvvygdcg.....sky	379
Seq_ID_23	LTVaASTiDRefpAdViLGdgriFgGvslySg..dplgdSkpllvvygdcg.....sql	386
MDC16.21	LTVGASTvDRefpAanaitGdgkvFtGtslyag..eslpdSgslsvvygdcg.....srl	388
Seq_ID_27	tTVGAgTmDRfepAyisLGNGkkFsGvslySg..kalpsSvmplyvagnasqasn..gnl	385
SBT1	tTVGAgTmDRfepAyigigNGkklnGvslySg..kalpsSvmplyvagnvsqssn..gnl	385
ARA12	tTVGAgTlDRfepAlailLGNGknFtGvslyfkg..ealpdklpfiyagnasnatn..gnl	385
Seq_ID_26	.....	1
SBT2	tTVGASTmDRdfePATVeLGtgkivtGaslykgzmnlstqkqypliylgsnssnlmP.ssl	400
Seq_ID_28	.....	0
F22M8.3	mTVaASytdRtfePAiVriGNrkslvGsslykgk.....SlknlplafnrtagEesgAvF	378
Seq_ID_29	.....	0
Consensus	ltvgast dr f atv lngng f g s s	420

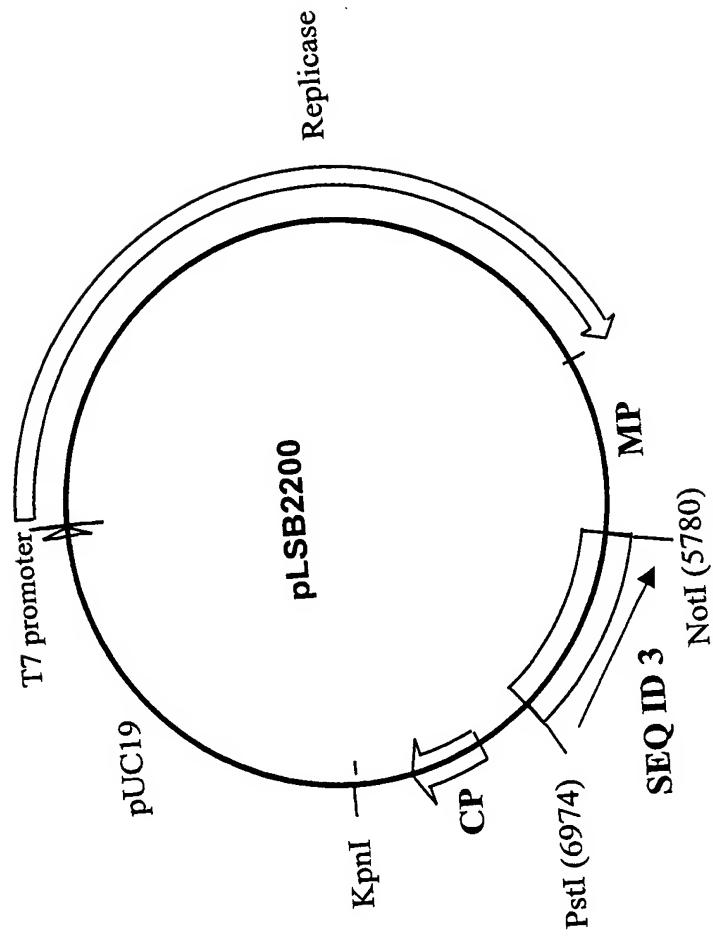
Seq_ID_40	CIPGSLTDP.....	248
Seq_ID_39	CIPGSLTDP.....	248
Seq_ID_25	CIPGSLTDPsirgkivvclvgggvrtvdkgqvvdagvggmilinnpedgvtksaeahvl	299
P69D	CsPGSLnDpaikgkivlclrsislrrvaqgsvkdagvggmilineqkrvgtksaeahvl	438
P69A	CrsgSLTDPvirgkivclagggvprvdkgqavkdagvggmiliinqrsgvtksadahvi	438
P69C	CrPGSLTDPairgkivlclafggvtivdkgqavkdagvggmiliinspddgvtkssadahvl	437
P69B	CrrGSLTDPairgkivlcsalghvanvdkgqavkdagvggmiliinspdygvtkssadahvl	437
Seq_ID_24	CrswamTDpaikgkivlclqkdpssltssqgrnvkdagvggmilinnpedgvtkssatahvl	298
CUSSP	CtdkSvnpnllkgkivvceasfgphffksldg..aagvlmtsn.....trdyadsypl	431
Seq_ID_19	lqknahkfivvcldknd.....svgehvynvrnskvagavfitn...t.tdl.efylqsef	288
Seq_ID_18	leknaahkfavcydtng.....svsdqlynvkntkvaggifitn...y.tdl.efylqsef	439
Seq_ID_20	lqnvtchkfivvcldkna.....lvkgqvsvrhnnaagavfitnd..fvtdlge.ylktef	366
SBT4	qfPdpgntiicdyknledgfgfdsqifhvtgarfkagifise...dpavfrvasft.h	452
SBT3	qvenpentivicddn..gd.fs.d.qmriitrarlkaalfise...dpgvfrsatfp.n	439
AG12	davyS...vviceait.....piyaqidaitrsnvagailisn...htklfelgggvsc	438
AIR3	CklGSLdpiktkgkilvclr.ggnarvekgavkqagvggmilanladsgeelvdshll	463
Seq_ID_21	CyPGkLdpkkvagkivlclr.ggnarvekgavkqagvggmilanladsgeelvdshll	438
Seq_ID_22	CyPGkLdpkkvagkivlclr.ggnarvekgavkqagvggmilanladsgeelvdshll	438
Seq_ID_23	CyPGmLdpkskvagkivlclr.ggnarvekgavklaggagmvlanladsgeelvdshll	445
MDC16.21	CyPGkLnsslvegkivlclr.ggnarvekgavklaggagmilantaesgeeltadshlv	447
Seq_ID_27	CtsGSLipekvdkivvclr.gmnaraqkgvlvkdaggigmilantdsygdeldadahli	444
SBT1	CtsGSLipekvagkivvclr.gmnaraqkgvlvkdaggigmilantdygdeldadahli	444
ARA12	CmtGtLipekvkgkivmclr.ginarvqkgdvkaagvggmilantaangeelvdadahli	444
Seq_ID_26	.....	1
SBT2	CldGtLdkasvagkivclr.gisprvqkgqvkeagvggmiltntaangeelvdshll	459
Seq_ID_28	.....driekgavknagvggmilinrlqdgstksadahvl	36
F22M8.3	CirdSLkrelvegkivclr.gasgrtakgeevkrsggaamlvsteaeegeelladphvl	437
Seq_ID_29	.....	0
Consensus	c g l gkiv c g v kg vk agvggmil n g ad h l	480

Seq_ID_40	.....S.....	249
Seq_ID_39	.....S.....	249
Seq_ID_25	paldvsdadgkikilayi.nstsnpvaaitfhgtvlgd.knapivasfssrgpseasrgil	357
P69D	paldvsnadgkikilaym.nsssnpvaitfhgtvlgd.knapivasfssrgpsvaspgil	496
P69A	paldisdadgkikilaym.nstsnpvatitfqgtiigd.knapivaafssrgpsgasigil	496
P69C	paldvsdadgkikilaym.nstsnpvatiafqgtiigd.knapmvaafssrgpsraspgil	495
P69B	palvvsaadgkikilaym.nstsspvatiafqgtiigd.knapmvaafssrgpsraspgil	495
Seq_ID_24	paldvsheegekikayi.nstsnpiaaitfqgtvlgd.knapivasfsargpsranpgil	356
CUSSP	pssvldpndllatlrlyi.yisirspgatitfksttiln..asapvvvsfssrgpnratkdvi	488
Seq_ID_19	.....	288
Seq_ID_18	pavflnfedgdkvleyi.knshspkarlefqvthlga.kpapkvasyssrgpsescpfil	497
Seq_ID_20	psvflnfqngdqvlkyv.nstsspkakigltggtligv.erapavahfssrgpsmtcpfil	424
SBT4	lgvvidkkekqkvinyv.knsvsptatitfqetyvdrerpfpflgyssrgpsrsyagia	511
SBT3	pgvvvnkkekqkvinyv.knsvtptatitfqetyldt.kpavvvaassargpsrsylgis	497
AG12	pclvispkdaalikya.ktdefplaglkfgetitgt.kpapavayysrgpspsypgil	496
AIR3	patqltskdsfavryi.sqtckpiahtpstrtdlg.lkpapvmassfsskgpsivapgil	521
Seq_ID_21	patmvggkagdkirhyv.tsdpstativfrgtvigkspaaprvaafssrgpnhltpcil	497
Seq_ID_22	patmvggkagdkirhyv.tsdpstativfrgtvigkspaaprvaafssrgpnhltpcil	497
Seq_ID_23	patmvggkagdeirdyv.ksdsspkativfkgtvigkspapriaafsgrgpnnyvtpeil	504
MDC16.21	ptmgvagkagdkirhyv.sptakisflgtligpspsprvaafssrgpnhltpvil	506
Seq_ID_27	ptgavvgtagxlirxi.asdsnpittiafggtklgvqp.spvvaafssrgpnpitpeil	502
SBT1	ptaavvgtagnlkqyi.asnsnptatiafggtklgvqp.spvvaafssrgpnpitpdvl	502
ARA12	pattvgekagdiirhyv.ttdpnptasisilgtvvgvqp.spvvaafssrgpnstpnil	502
Seq_ID_26	.....	1
SBT2	pavavgeregraiklya..agrsatatrlflgtklgirp.spvvaafssrgpnflsleil	516
Seq_ID_28	paldvsffdgfqiteym.kstknparitfqgtiigd.knapvlagfssrgpstaspgil	94
F22M8.3	pavslgfsdgkttlnylag.aanatasvrfrgtayg..atapmvaafssrgpsvagpeia	494
Seq_ID_29	.....	0
Consensus	pa v g i y s p a i f g t g ap va fssrgps p il	540
Seq_ID_40	.....	249
Seq_ID_39	.....	249
Seq_ID_25	kpdiigpgvnlvaawptsvd....nnkntkstfniisgtmsmcp.....	397
P69D	kpdiigpgvnlvaawptsvd....nnkntkstfniisgtmsmcp.....	551
P69A	kpdiigpgvnlvaawptsvd....dnkntkstfniisgtmsmcp.....	551
P69C	kpdiigpgvnlvaawptsvd....dnkntkstfniisgtmsmcp.....	550
P69B	kpdiigpgvnlvaawptsvd....dnkntkstfniisgtmsmcp.....	550
Seq_ID_24	kpdiigpgvnlvaawpttvi....pnkntnsgfniisgtmsmcp.....	398
CUSSP	kpdisgpgveilaawpsvapv....ggirntlnfniisgtmsmcp.....	544
Seq_ID_19	.....	288
Seq_ID_18	kpdlmapgalilaswpqkspatqi.rsgelfsnfniisgtmsmcp.....	556
Seq_ID_20	kpdlmapgalilaswplssvspy..t.elhnifniisgtmsmcp.....	481
SBT4	kpdlmapgalilaavppnipsvsi.enlqltttdyelksgtsmaaphaagiaamlkghpd	570
SBT3	kpdlapgvnilaayppnvfatsignilstdyilesgtmsmaaphaagiaamlkaahpe	557
AG12	kpdlmapgslvaswipneataqigtnvylsshynmvsgtsmacphasgvaallkaahpe	556
AIR3	kpdlmapgsviaaytgavspnteqfdpr.1lfnaisgtmsmcp.....	580
Seq_ID_21	kpdlmapgvnilagwtgsvgptdl.didtrrvefniisgtmsmcp.....	556
Seq_ID_22	kpdlmapgvnilagwtgsvgptdl.didtrrvefniisgtmsmcp.....	556
Seq_ID_23	kpdlmapgvnilagwtgsvgptdl.eidtrrvefniisgtmsmcp.....	563
MDC16.21	kpdlmapgvnilagwtgsvgptdl.didprrvqfniisgtmsmcp.....	565
Seq_ID_27	kpdlmapgvnilagwtgsvgptgl.pedtrnvgnfniisgtmsmcp.....	561
SBT1	kpdlmapgvnilagwtgsvgptgl.qedtrnvgnfniisgtmsmcp.....	561
ARA12	kpdlmapgvnilaawtgagptgl.asdsrrvefniisgtmsmcp.....	561
Seq_ID_26	.....	1
SBT2	kpdlmapgvnilagwtgalgsssl.pidqrtnfniisgtmsmcp.....	575
Seq_ID_28	kpdiigpgvnlvaawptsvenktn....tkstfniisgtmsmcp.....	149
F22M8.3	kpdlmapgvnilagwtpfsspl.sllrsdprrvqfniisgtmsmcp.....	553
Seq_ID_29	.....	0
Consensus	kpdl apgvnila w v fniisgtmsmcp sg aallk hp	600

Seq_ID_40	.....	249
Seq_ID_39	.....	249
Seq_ID_25	.....	397
P69D	wspaaiksammttadtlnlanspilde.r...lisadlfamgaghvnpstrasdpglvydt	607
P69A	wspaaiksammttadtlnlanspilde.r...llpadiyaigaghvnpstrandpglvydt	607
P69C	wspaaiksaimttadtlnlanspilde.r...llpadifatgaghvnpstrandpglvydi	606
P69B	wspaviksammttadtlnlanspilde.r...llpadiyaigaghvnpstrandpglvydt	606
Seq_ID_24	.....	398
CUSSP	wspaaiksalmttaspmn.....a.r...fnpqaefaygsgghvnpkavrpglvyda	592
Seq_ID_19	.....p.....	289
Seq_ID_18	wspaaairsammttadtmdnmqmpirdi.gr.nnnaasplamgagrinpnkaldpgliyd	614
Seq_ID_20	wspaaairsammttadvldntqspiqdi.grpenaaatplamgaghinpnkaidpgliyd	540
SBT4	wspaaairsammttanhlnsaqdpite...dddmvasplgigsgghvdpnraldpglvyda	626
SBT3	wspaaairsammttadpldntrkpkids...dnkkaatpldmgaghvdpnraldpglvyda	614
AG12	wspaaairsammttanpldnlnpihen.g.kkfhlaspamgaghidpnraldpglvyda	614
AIR3	wspaaairsaimttatimddipgpigna.tn...mkatpfsfgaghvqpnlavnpglvydl	636
Seq_ID_21	wtpaavksalmttaynldnsgkvftdl.a..tggestpfvghsgghvdpnraldpgliyd	613
Seq_ID_22	wtpaavksalmttaynldnsgkvftdl.a..tggestpfvghsgghvdpnraldpgliyd	613
Seq_ID_23	wttaaiksalmmttaynvdnsgkftfdl.a..tgqesspfvghsgghvdpnraldpglvydi	620
MDC16.21	wspaaiksalmvttaydvnsgepiedl.a..tgkssnsfihgaghvdpnklnpglvydi	622
Seq_ID_27	wsxgvralsalmttgysthknxgmiedv.a..tgmsytpvdhgaghvnpaaamnpglxydl	618
SBT1	wspaaairsalmmttsystyknktiedv.a..tgmsstpfdygaghvnpaavspglvydl	618
ARA12	wspaaairsalmmttayktykdgkplldi.a..tgkpstpfhdgaghvspttatnpgliyd	618
Seq_ID_26	.....asdgaghinprkavdpglvydi	23
SBT2	wspaaiksalmmttayvhdntykslkda.s..svtpstpydhgaghvnpkavdpglvydi	632
Seq_ID_28	wspaaiksaimttadtlnlannpilde.mlr...panifaigaghvnpstrandpglvydt	205
F22M8.3	wspamiksaimttaritdnrnrpigrdgaagaesaatafafgagnvdptravdpglvydt	613
Seq_ID_29	.....aitaghvnpesaidpgliyd	21
Consensus	wspaa i sa m t t a p i d g a g h v p a d p g l v y d	660
Seq_ID_40	.....	249
Seq_ID_39	.....	249
Seq_ID_25	.....	397
P69D	pfedyipylcglnyt...nrevgkvqlrkvncsevkripegqlnypsfsirlg.s....	658
P69A	pfedyvpylcglnyt...nrqvgnlqlrkvncsevksileaqlnypsfsiylgls....	659
P69C	pfedyipylcglnyt...nrqvgnlqlrkvncsevksiileaqlnypsfsicitelgs....	658
P69B	pfedyvpylcglkylt...dqvgvnlqrrvncsevksileaqlnypsfsifglgs....	658
Seq_ID_24	.....	398
CUSSP	nesdyvkflcgggyn...tgavrritgdysactsgntgrvwdlnypsfsflsvsps....	644
Seq_ID_19	.....	289
Seq_ID_18	tsqdyinllcaldft...sqqikaitrssayscsnss...ldlnypsfigyfnynssesd	668
Seq_ID_20	tpqdyinllcalnlt...seqiktitrss.ytcbnps...ldlnypsfiayfnvnsseld	593
SBT4	tpqdyinllcslnft...eeqfktfarssanyhncsn.psadlnypsfiayfysysqegny	682
SBT3	tpqdyvnlcslnft...eeqfktiarssas.hncsn.psadlnypsfiayfysiegnf	667
AG12	tpqdyinllcsmnyn...kaqilaivrsdsy..tcndpsedlnypsfiayfhns....tc	665
AIR3	gikdylnflcslgyn...asqisvfgsnfftcsspk.islvnllypsitvpnlts....	687
Seq_ID_21	etsdyvnflcslgdygdvavfardssrvn.crserslatpgdlnypsfsfvvftge....	667
Seq_ID_22	etsdyvnflcsmaygdvavfardssrvn.crserslatpgdlnypsfsfvvftge....	667
Seq_ID_23	dkdyvdfldaigydpkrispfvkdtsvn.cseknlvspgdlnypsfsfvvf.g....	672
MDC16.21	evkeyvafldcavgyefpgilvflqdpdtydacetsklrtagdlnypsfsfvvf.a....	675
Seq_ID_27	tvddyinlflcaldy...spsmikviakrdisccnknkdielltlithllpflwkrawgeha	675
SBT1	tvddyinlflcaldy...spsmikviakrdisccnkeyrvadlnypsfsipmetawgeha	675
ARA12	ttedylgflcalnyt...sp.qirsvsrrnytcdpksysvadlnypsfaavnvdgv.g..a	672
Seq_ID_26	gaqdyfelfctqqls...psqltvfgkfsnrtchhslanpgdlnypaisavfpedakvs.	79
SBT2	gaqdyfelfctqels...psqlmvfgkfsnrtchhslanpgdlnypaisavfpektkls.	688
Seq_ID_28	qfkdyisylcglkytdr...qmgslqlrtrscskvksipeaqlnypsfsislgan....	257
F22M8.3	stvdylnylcslnytserillfsgtntcasnavvls..pgdlnypsfaavnlvng....	666
Seq_ID_29	dttdylnllcslnytekemklftnes...npcsgftgspldlnypsfsvmfrpd....	72
Consensus	dy l c l y c d l n y p s f	720

Seq_ID_40	.....	249
Seq_ID_39	.....	249
Seq_ID_25	.....h.....	398
P69D	.....tpqtytrtvtnvgdakssykeiv.spkgvvvkvepsalnfstlnqklyqvft	712
P69A	.....tpqtytrtvtnvgdakssykeiva.spealpskltr..anfssdqklyqvftfs	711
P69C	.....rlfertli.....	666
P69B	.....tpqtytrtvtnvgdatssykeiva.spegvaievepselnfsealnqklyqvftfs	712
Seq_ID_24	.....	398
CUSSP	...qtfnqyfnrtlttsvapqastyramis.apqgltisvnpn...vlsfnglgdrksftl	697
Seq_ID_19	.....	289
Seq_ID_18	...pkriqefqrtvtnvgegmsvytaklt.smgdykasvapdklvfkekyekqsyklrie	724
Seq_ID_20	...ptrvqefkrtvtnvgegvsyetaelt.ampglkvsvvpcklvfkdkyekqsyklrie	649
SBT4	...pwleqkfrtlttnvgkkgatykvkie.spknstisvspqtlvfknknekqsytltir	738
SBT3	...tlleqkfkrtvtnvgkaatyakalk.apknstisvspqilvfknknekqsytltir	723
AG12	...rrsvntfqrtvtnvgdgaatykatvt.apkdsrvivspqtlafgskyeqsyntlii	721
AIR3	.....skvtvsrtvkvngrp.smytvkvn.npqgvvyavkptslnftkvgeqktfkvilv	740
Seq_ID_21	..sng.vvkykrvvnnvgkntdavyevkvnapssevvnvvpaklvfseekqslsyaislk	724
Seq_ID_22	..sng.vvkykrvvnnvgkntdavyevkvnapssevvnvvpaklvfseekqslsyaislk	724
Seq_ID_23	..sds.vvknkrvvknvgrntnavyevkinapgsvevkvtpklfsfeknkslsyaisfs	729
MDC16.21	..stgevvkykrvvknvgsnvdavyevgvkspanveidvpsklafskeksvleyevtfk	733
Seq_ID_27	nssaptvtrytrtlttnvgnpatykasvss.emqevkigvepqtltfsrkkekttyvtft	734
SBT1	dsstptvtrytrtlttnvgnpatykasvss.etqdvkilvepqtltfsrkkekttyvtft	734
ARA12	.....y.kytrtvtsvggagtysvkvt.ettgvkisvepavlfnfkeanekksytvtft	724
Seq_ID_26	.....tltlhrtvtnvgspisnyhvrvs.pfkavvkvepsrlnftskhqklsykwife	132
SBT2	.....mltltlhrtvtnvgspisnyhvvs.afkgavvkveperlnftsknqklsykvtfk	741
Seq_ID_28	.....qqtytrtvtnvgeamssyrvkivs.pqnvsvvvkpstlkftklngklytrvtf	310
F22M8.3	..anlktvrykrtvtnvgsptceymvhve.epkgvkvrvpckvlkfkarerlsytvtfd	723
Seq_ID_29	..ssvhvkrtrtlthvavkpevykvkilnlnsekvslsismelmfneslrkqymvkfe	130
Consensus	rtvtnvg y p v p l f k y	780
Seq_ID_40	.....	249
Seq_ID_39	.....	249
Seq_ID_25	.....	398
P69D	kttnis.....ttsdvegflkwnsnrhsvrspiavrsvae.....	747
P69A	ktanss.....nteveiegflkwtsnrhsvrspiallliq.....	745
P69C	.....	666
P69B	kttnss.....npeveiegflkwtsnrhsvrspiavvsa.....	745
Seq_ID_24	.....	398
CUSSP	tvrgsi.....kgfvvsaslvwsdgvhvrsplititslv.....	731
Seq_ID_19	.....	289
Seq_ID_18	gpll.....diilfmvl.....	737
Seq_ID_20	cpqlmn.....dflvhgslswvekggkyvvrsprivatns.....	683
SBT4	yrgdfn.....sgqtgsitwvekngrsvrspiplttdlwgad.....	779
SBT3	yigdegq.....srnvgsitwveqngnhsrspiivtspiiev.....	761
AG12	nfrtdtk...rkdisfgalvwanengkhnsvrspiivvsplind.....	761
AIR3	ksgkn.....vakgyvfgelvwskkhrsvrspiivkl.....	772
Seq_ID_21	skks.gdlqmvkgiesafgsiewsdgihnvrspiavrwrhysdaasm.....	770
Seq_ID_22	skks.gdlqmvkgiesafgsiewsdgihnvrspiavrwrhysdaasm.....	770
Seq_ID_23	sngsvg.lervkglesafgsiewsdgihsvrspiavhllhsatesq.....	775
MDC16.21	svvlggvgvsgvpge..fgsiewtdgehvkvspvavqwgqgs.vqsf.....	777
Seq_ID_27	a.ss.....kpsgtts.farlewsdgqhvaspiafswt.....	766
SBT1	a.ts.....kpsgtts.farlewsdgqhvaspiafswt.....	766
ARA12	vdss.....kpsgsns.fgsiwsdgkhvvgspvaiswt.....	757
Seq_ID_26	tkyr.....qkare..fgsllwkdgthkvrstivitwlasl.....	166
SBT2	tvsvr.....qkape..fgsliwkdgthkvrspiaitwlasv.....	775
Seq_ID_28	ttn.....itnmevvhgylkwtssdkhfvrspiavilqehetped.....	350
F22M8.3	aeasrn.....ssssfgvlvwicdkynvrspiavtwe.....	756
Seq_ID_29	shhifnss.rkiaeqmafgsiswesekhnvrspfavmwvqqnfnsrlykit	181
Consensus	g w g h vrs pia	840

TMV-SeqID 3 (-)



3 pLSB2200

Figure 12A.

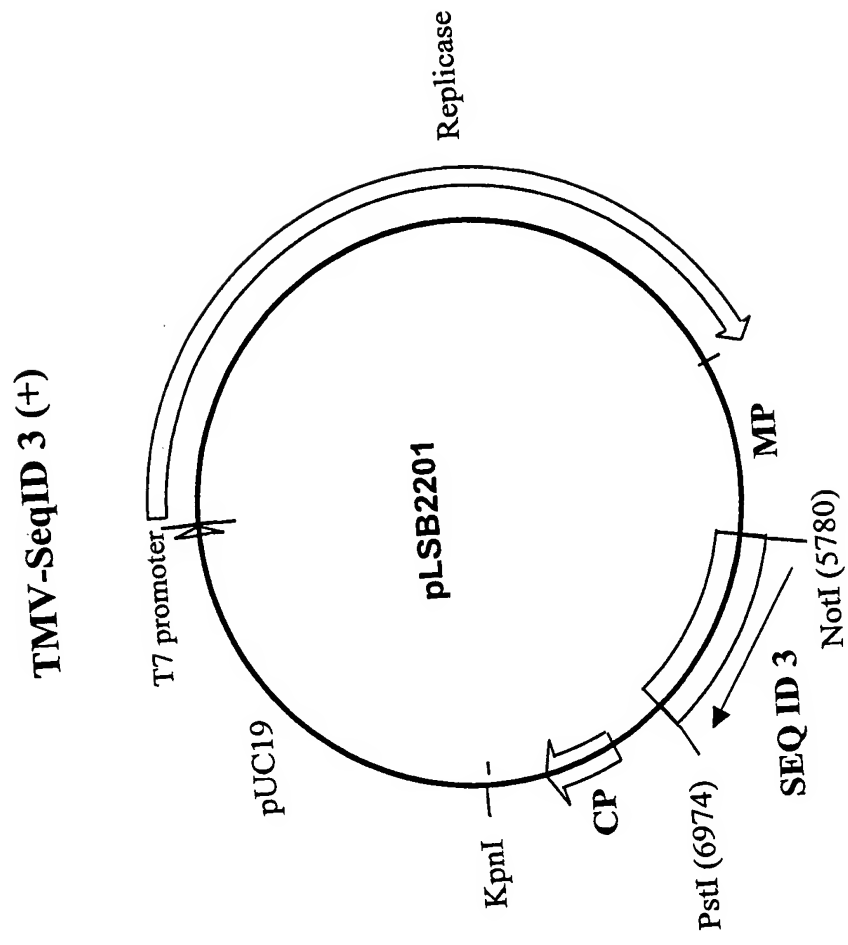


Figure 12B.

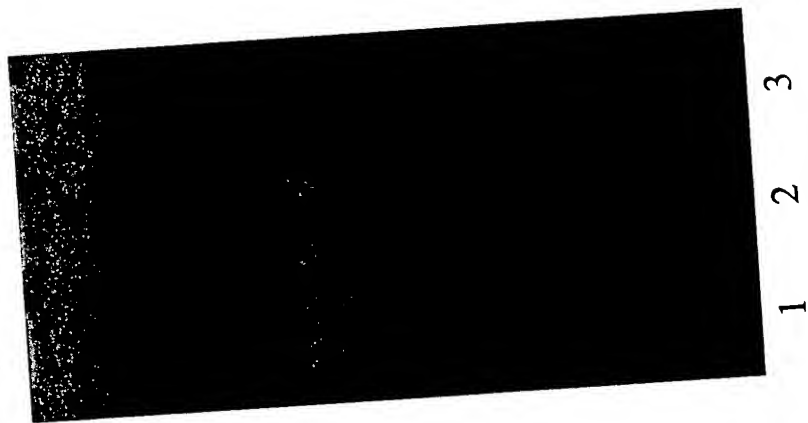


Figure 13.

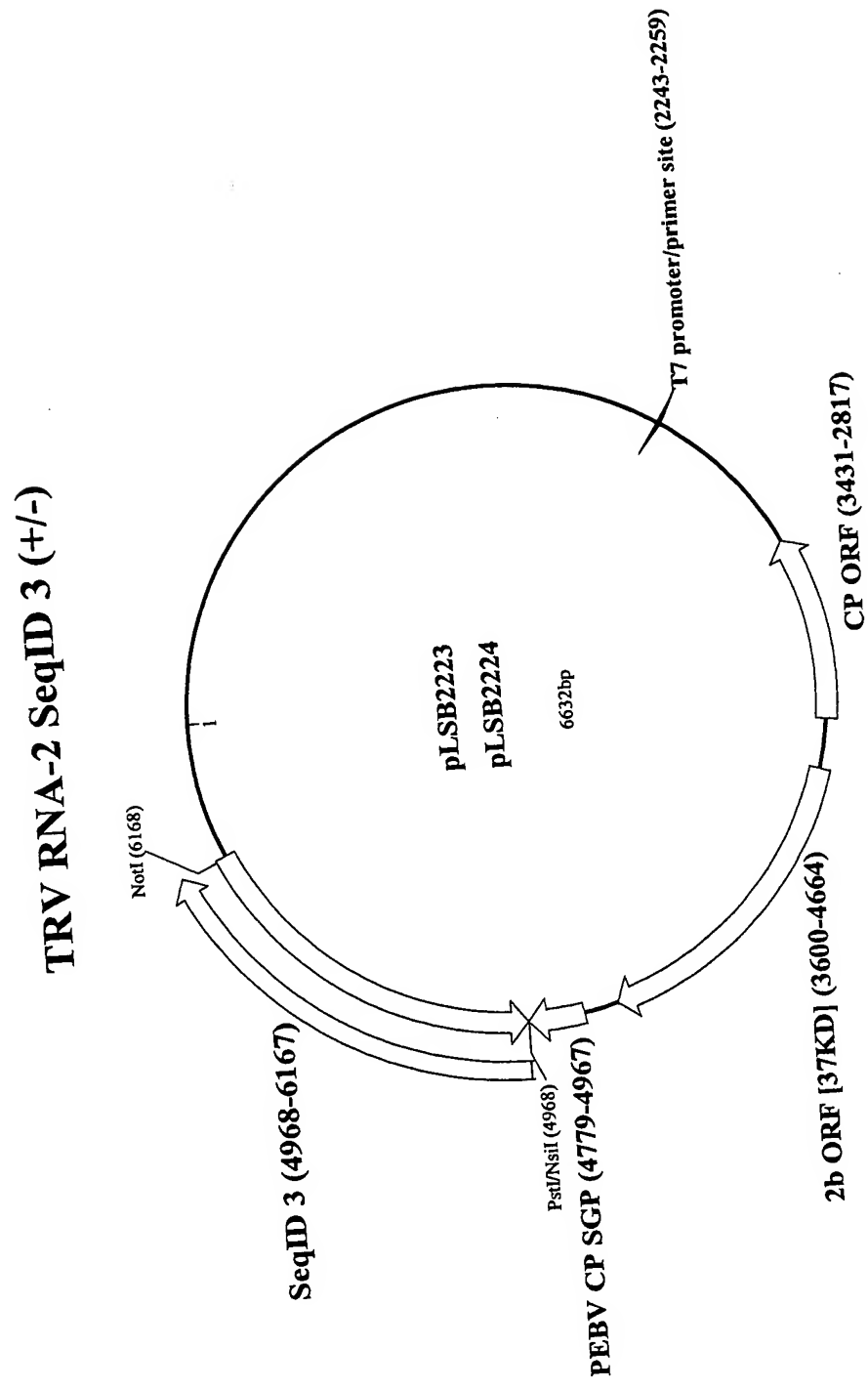


Figure 14.

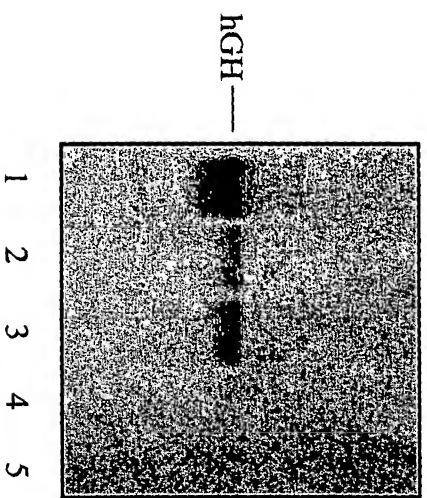


Figure 15.

Figure 16A

Seq_ID_17	0
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Seq_ID_14	0
Seq_ID_15	0
Seq_ID_4	0
Seq_ID_3	0
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Seq_ID_5	0
Seq_ID_8	0
Seq_ID_16	0
Seq_ID_13	0
Seq_ID_12	0
Seq_ID_9	0
Seq_ID_6	0
Consensus		
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Seq_ID_7	0
Seq_ID_11	0
Seq_ID_14	0
Seq_ID_15	0
Seq_ID_4	0
Seq_ID_3	0
Seq_ID_10	tcCattTTcTggTtacctGacacTgagaacCgcaAaaAgaTggcaAgaccCgggggcatg	120
Seq_ID_5	.....ccCacGCgtCcggtTtTtccATTctTTttcaTtAtTa.	37
Seq_ID_8	.....gtTtTtccATTctTTttcaTtAtTa.	25
Seq_ID_16	.....CacttTCtTcgtctTCTTcTTctTTctcCctctTaa	36
Seq_ID_13	.....	0
Seq_ID_12	.....	0
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		
Seq_ID_17	ATTAACATATGGCAGAGTCAGAAACTTATATCATCCATATGGACTTATCAGCCATGCCTAA	120
Seq_ID_7	.....	0
Seq_ID_11	.....	0
Seq_ID_14	.....	0
Seq_ID_15	.....G.....	1
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	gTTcttTcaacactAtTCctAAtgTTgTtTCATgtgTtTGttCaTgcagGCCAgaaCcAg	180
Seq_ID_5	tcTcttTcTGcCtcAcTCcGgtgaccAttTCcgtCcaATccgaTggTCatgaAacttTcA	97
Seq_ID_8	tcTcttTcTGcCtcAcTCcGgtgaccAttTCcgtCcaATccgaTggTCatgaAacttTcA	85
Seq_ID_16	tcTtctTcTttCtcAactctttAgTaAttTCAGtCcaATtGgacggTCataaAacttTcA	96
Seq_ID_13	.....	0
Seq_ID_12	.....	0
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		

Seq_ID_17	AGCTTTTTCTAGCCATCAGAATTGGTACTTGACCACTCTTGCTTCTGTATCAGGTAGTTC	180
Seq_ID_7	.....	0
Seq_ID_11	.....	0
Seq_ID_14	.....	0
Seq_ID_15	.....	1
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	AaaaagactTAcataatttAcaTGacaagtcCaACataacctgctgaTtTtgatgAtcaC	240
Seq_ID_5	tcaTTcacgTttCCAaatccgaTaagcCccGtggtttTCaccaccCaccACattggtact	157
Seq_ID_8	tcaTTcacgTttCCAaatccgaTaagcCccGtggtttTCaccaccCaccACattggtact	145
Seq_ID_16	tagTcacgTgtCCAatcccaTaagcCccacatctTtactaccCgccAaCattggtact	156
Seq_ID_13	.....	0
Seq_ID_12	.....	0
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		
Seq_ID_17	AAGTCTTGGAAGTAAAGTAATAGAAATTCCTTTTCCTCATCAAACTA..GTATATGCT	238
Seq_ID_7	.....	0
Seq_ID_11	.....ACcc..cTcgAccna	13
Seq_ID_14	.....	0
Seq_ID_15	.....	1
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	ActctgTGGtAtgactcaTctTtaAAGTcagTaTcCaaaggCgccAacAtgcTtTacaCc	300
Seq_ID_5	cctcCaTcatcCgatccGT.....ttcccaaCaCcttctAaaAtccTcTacaCc	207
Seq_ID_8	cctcCaTcatcCgatccGT.....ttcccaaCaCcttctAaaAtccTcTacaCc	195
Seq_ID_16	cctcCaTcctcCgatcAGTctcttct..TcttcccaaCaCtctgccAaaAtccTtTactCT	215
Seq_ID_13	.....	0
Seq_ID_12	.....	0
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		
Seq_ID_17	TACACTAACGCTATTCATGGTTTTAGTGCAACTCTTCTCCTTCTGAGCTACAAGTTATA	298
Seq_ID_7	.....	0
Seq_ID_11	cgCgncngC.CcAcgCgTccgcccAcgcgtcCgCTTCTCCTTCcGAGtacaAAGccATc	72
Seq_ID_14	.....	0
Seq_ID_15	.....	1
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	TACAacAAtGtcATcCATGGcTactcaaCacagCTaaCagCTgaTGAagccaAAtcTcTt	360
Seq_ID_5	TAtgaacgtGCcgccgtgGGcTTctcTGCACgcCTcaCagCcgCTcAGgccgAtcagcTc	267
Seq_ID_8	TAtgaacgtGCcgccgtgGGcTTctcTGCACgcCTcaCagCcgCTcAGgccgAtcagcTc	255
Seq_ID_16	TACgaTtAtGCTgccCgTGGTTTctcTGCcgcTCTcaCTtCcgggcAGgctgAccggcTc	275
Seq_ID_13	0
Seq_ID_12	0
Seq_ID_9	0
Seq_ID_6	0
Consensus		

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Seq_ID_7	0
Seq_ID_11	AAgAATTCTCtAGGgTATgTTTCTTCgAtggAGGACAgGACAGTTAAAAATTcACACGACc	132
Seq_ID_14	.....	0
Seq_ID_15	.....	1
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	gAAcAgcaaCCtGGaatTCTcTCggtccaTgAGGAagTGAgAtacgAgcTTcAtACcACT	420
Seq_ID_5	cgccgTatTCCcGGtgtaaTcTCcgtcctTcccGACgaagtAcgccAtcTccACACcACc	327
Seq_ID_8	cgccgTatTCCcGGtgtaaTcTCcgtcctTcccGACgaagtAcgccAtcTccACACcACc	315
Seq_ID_16	cgccgcatgCCtGGCgtggTcTCcgtcgtacctGACcgtgCacgTcAgcTTcACACcACT	335
Seq_ID_13	.....	0
Seq_ID_12	.....	0
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		
Seq_ID_17	CACACGTCTCAATTCCTTGGCCTAAATTCGATTCTGGTGCATGG..CCAAAGTCAGACT	416
Seq_ID_7	.....	0
Seq_ID_11	CAttCaTCCaTtTCCTTGGCCTAAgCTCaatgTaTGGTtCATGG..CCAAAGTCaAACT	190
Seq_ID_14	.....	0
Seq_ID_15	.....	1
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	CgatCccCTacATTtCTgGGAcTtgAaggacgTgaaaGTaaATcattCtttctTCAagCT	480
Seq_ID_5	CAtACccCTaccTTCTgGGAcTtgcTgaCtcTTtcGGccttTGG..CCcAAcTCCgATt	385
Seq_ID_8	CAtACccCTaccTTCTgGGAcTtgcTgaCtcTTtcGGccttTGG..CCcAAcTCCgATt	373
Seq_ID_16	CACACacCgaccTTCTaGGCCTcgcagattcaTtTGGgcttTGG..CCcAAcTCCgATt	393
Seq_ID_13	.....	0
Seq_ID_12	.....ctCcgAtcgaaatcctaAGTctAaattgCCAgtTtgctag	41
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		
Seq_ID_17	ATGGCAAA...GATGTTATAGTTGGATTAGTTGACACA.GGGATTtGGCCAGAGAGTAA	471
Seq_ID_7	.....t.GGTATcaacgCAGAGtGccA	21
Seq_ID_11	ATGGCAAA...GgTGTTATcaTTGGtgTAGTTGAtACA.GGGgTTTGGCCAGAGAtTAA	245
Seq_ID_14GgcGTgATtaTcGGAgTtaTaGACACT.GGaATTgttCCTGAccaTcc	47
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Seq_ID_5	AcGctgAt...GATGTcATcGTcGGAgTtcTgGACACg.GGtATaTGGCCgGAaAGacc	440
Seq_ID_8	AcGctgAt...GATGTcATcGTcGGAgTtcTgGACACg.GGtATaTGGCCgGAaAGacc	428
Seq_ID_16	AcGctgAt...GAcGTcATcGTcGGggTgcTcGACACg.GGcATTtGGCCcGAaAGgcc	448
Seq_ID_13	.....	0
Seq_ID_12	AgccagAAatctctcaagtgcccaGaAgcctTgagCgCgaGGtgccTGGCcttAatcagA	101
Seq_ID_9	.....	0
Seq_ID_6	0
Consensus	g gt at t ggagt t gacac gg attt cc ga c	
Conserved Region A		

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Seq_ID_7	ttACggccgggGATgATGGGATTAgTGAAGTACCATCAAGATGGAAAGGAGAATGTGAAA	81
Seq_ID_11	AAGCTtT.gATGATgATGGGATGAgccAAGTTCCATCAAGgTGGAAAGGAatATGTcAAA	304
Seq_ID_14	ttcaTtT.AgcGAcgtTGGGATGcCTcctccgCCTgCtAaATGGAAAGGAtttTGTGAgT	106
Seq_ID_15	ttcaTtT.AgcGAcgtTGGGATGcCTcctccgCCTgCtAaATGGAAAGGAtttTGTGAgT	107
Seq_ID_4	ttcaTtT.AgcGAcgtTGGGATGcCTcctccgCCTgCtAaATGGAAAGGAtttTGTGAgT	106
Seq_ID_3	ttcaTtT.AgcGAcgtTGGGATGtCTcccccgCCTgCtAagTGGAAAGGAtttTGTGAgT	106
Seq_ID_10	AAGtTtT.gATGAcAcTGGAcTaggTccAGTcCCTatgAGcTGGAAgGGtGAGTgcccAAA	598
Seq_ID_5	gAGtTtT.tccGAcgAgGGtcTctCTacgGTTTCCTCAAGtTGGAAAGGgaAgTGcGttA	499
Seq_ID_8	gAGtTtT.tccGAcgAgGGtcTctCTacgGTTTCCTCAAGtTGGAAAGGgaAgTGcGttA	487
Seq_ID_16	gAGCTtT.tccGAcggcGGGcTttCTGcAGTcCCTTCcgGtTGGAAAGGAaAATGcGAAA	507
Seq_ID_13	.....	0
Seq_ID_12	AAGCTtT.AtTGATgAaGaatTGggaccAaTTCCATCtAagTGGAgAGGgattTaccAAA	160
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus	ttt gacg tggg t ct c t cct c a tggaaagga tg ga a	
Conserved Region A		

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Seq_ID_7	GTGGtACTgAgTTcAATTCCTCTTTgTgTAACAAGAAgCTCATtGGcGcTCGTTACTTCA	141
Seq_ID_11	cTGGcACTCAgTTAATTCTcATtTgTGCAACAAGAAACTCATcGGaGcTCGTTACTTCA	364
Seq_ID_14	cTaatttcacgaccAA.....gTGtAACAACAAACTCATtGGaGCcAGgTctTTC.	156
Seq_ID_15	cTaatttcacgaccAA.....gTGtAACAACAAACTCATtGGaGCcAGgTctTTC.	157
Seq_ID_4	cTaatttcacgaccAA.....gcGtAACAACAAACTCATtGGaGCcAGgTctTTC.	156
Seq_ID_3	ccaatttcacgacaAA.....gTGtAATAACAAGaTCATaGGactcaGgTctTtT.	156
Seq_ID_10	tTGGcAagaAcTtCAAgCaTcaagcTGtAACcgGAAACTCATtGGTGCaaGgTtctTCT	658
Seq_ID_5	cTGGAcCTgAtTTTccTgaaaCcTcATgTAATAAAAAATCATaGGcGCtCaaatgTTtt	559
Seq_ID_8	cTGGAcCTgAtTTTccTgaaaCcTcATgTAATAAAAAATCATaGGcGCtCaaatgTTtt	547
Seq_ID_16	cTGGgctggAcTTTccTgCaaCTTcATgTAACcgtAAAAATCATcGGTGCTCGAtTgTTtt	567
Seq_ID_13	.....	0
Seq_ID_12	aTaattCTgAtcacAcc...TtTTagTGCAAAAgGAAGCTaATTGGaGCaaGgTACTTCA	217
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus	ct a aa tgtaacaa aaactcat gg gc g t ttc	

Seq_ID_17	ACAAAGG.....CCTAATTGCCAATA...ATCCGAATATTACCATCTCGATGAATTcAG	641
Seq_ID_7	AtAAAGG.....CCTAcTTGCCAAcA...ATCCaATcTTAatAtttCAATGAATTCTt	192
Seq_ID_11	AtAAAGG.....aCTAcTTtCtAAag...tgaaaAATcTTACCATCatGATaAATTCTg	415
Seq_ID_14	.....CcgcT...tgAc.....AATggtc	172
Seq_ID_15	.....CcgcT...tgAc.....AATggtc	173
Seq_ID_4	.....CcgcT...tgAc.....AATggtc	172
Seq_ID_3	.....CgAtTatCtgAa.....gATaCcc	175
Seq_ID_10	cacAAGGttatgaagcAgcTttCgggg...caattgATgagACCACagaatccAAGTCAC	715
Seq_ID_5	ACAAAGGgtatgaagctAaacatgg...cccaatGgATgaatCaAaagaatcaAAaTCgc	616
Seq_ID_8	ACAAAGGgtatgaagctAaacatgg...cccaatGgATgaatCaAaagaatcaAAaTCgc	604
Seq_ID_16	ACAAAGGttacgaagctgaTcgtggaAgcccaattgAcgaatCtAaagaatctAAaTCgc	627
Seq_ID_13	.....	0
Seq_ID_12	ACgAAGGatacgtgactcTaGCaAgat.....cTcTcAattcaagttTctAcaCAC	268
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus	aagg c t tg aa c c	

Seq_ID_17	CTCGTGACACTGATGGGCATGGAACCTCACACATCCTCTACAGCTGCAGGAAGTCATGTAG	701
Seq_ID_7	CTaGaGAtACcGATGGaCATGGAACCTCACACTTCTTCTACAGCTGCgGGAAGTtATGTTg	252
Seq_ID_11	CcCGTGAtACaGAgGGaCATGGAACCTCaTActTCCTCTACAGCTGCtGGAAGTtCTGTAA	475
Seq_ID_14	CcataGAtgaaaATGGaCATGGtACgCatACAgCaagcACAGCTGCAGGAgccttTGTga	232
Seq_ID_15	CcataGAtgaaaATGGaCATGGtACgCatACAgCaagcACAGCTGCAGGAgccttTGTga	233
Seq_ID_4	CcataGAtgaaaATGGaCATGGtACgCatACAgCaagcACAGCTGCAGGAgccttTGTga	232
Seq_ID_3	CgataGAtACTGATGGaCATGGtACaCACACTgCtagcACAGCTGCAGGAgcTttTGTga	235
Seq_ID_10	CaaGgGACgaTGATGGcCATGGgACaCACACTgCaaCTACAGCaGctGGctcggtTGTAa	775
Seq_ID_5	CaaGaGAtACTGAaGGaCATGGAACaCatACAgCaTCaACAGCaGctGGttcTttaGTgG	676
Seq_ID_8	CaaGaGAtACTGAaGGaCATGGAACanAtACAgCaTCaACAGCaGctGGttcTttaGTgG	664
Seq_ID_16	CaaGaGAtACTGAaGGaCATGGgACTCACACTgCtTCaActGCaGctGGatcTgtTGTAG	687
Seq_ID_13	.....	0
Seq_ID_12	CaCGaGACACTGATGGaCATGtttCcCACACgcagTtcAagGaTcaAGtggtTcccGgta	328
Seq_ID_9	.....	0
Seq_ID_6	.....ggCCatTACgGCCGggcacgtgaATcctG	29
Consensus	c agagatac gatggacatgg ac ca ac gc acagctgc gga ct ttgt	

Conserved Region B

Seq_ID_17	AATCTGCATCTTATTTTGGCTATGCGCGTGGTTCTGCTACAGGGATGGCACCAAGGCTC	761
Seq_ID_7	AgggTGcATCTTATTTTGGCTATGcCaccGGTaCTGCTAttGGcATaGcGcCAAGGCTC	312
Seq_ID_11	AgggTGcGtCTTATTTTGGCTATGcCcCtTGGTtTGCaAtAGGcgTcGCACCAATGGCTC	535
Seq_ID_14	AAGgTGCTaaTgtaTTTGGgaATGCcaaTGGaaCaGcagttGGtgTtGccCCTcttGCgt	292
Seq_ID_15	AAGgTGCTaaTgtaTTTGGgaATGCcaaTGGaaCaGcagttGGtgTtGccCCTcttGCgt	293
Seq_ID_4	AAGgTGCTaaTgtaTTTGGgaATGCcaaTGGaaCaGcagttGGtgTtGccCCTcttGCgC	292
Seq_ID_3	AAGgTGcCaaTTtCTTGGtaATGCaaaTGGcaCaGcagttGGtgTtGccCCTcttGCcC	295
Seq_ID_10	cgggaGcTagcctcTTTGGtTATGcTgTGGcaCaGcagttGGGATGGcTtCACAtGcCaa	835
Seq_ID_5	cAaaTGcTagcTtTTaccaaTATGCcaaaGGT.....ATGGCtatAAAAGCaa	724
Seq_ID_8	cAaaTGcTagcTtTTaccaaTATGCcaaaGGTgaaGCTAGAGGtATGGCtatAAAAGCaa	724
Seq_ID_16	ctaacGcTagTtTTTTCaaTAcGCaaaaGGTgaaGCTAGAGGcATGGCtggtAAaGCTC	747
Seq_ID_13	.....	0
Seq_ID_12	tggaaa.....TGGaacaGCaaagGGTggatCacCAaaagTaagAgtAgcaGCTt	378
Seq_ID_9	.....cccaCgcgtCcgATGGTgCaG.gACAcAtAaatCcaCgAAaagct	44
Seq_ID_6	AATCgGctatTgATccgGGCctaataTatGacaCTG..AtAcatcaGaCtaCaaCct	87
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Conserved Region B

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Seq_ID_7	ATGTGGcTATGTACAAGGCTcTaTGGGAAGAAG...GTgtAtacTTgTCTGATgTTCTtG	369
Seq_ID_11	ATGTGGCtgTGTACAAGGCTcTcTGGGAtGggG...ccggtAccaTtTCTGATATTCTtG	592
Seq_ID_14	AcaTaGcCAtaTaTaAAGGtaTgCGGttctGATGgcgtTtgttctgatgtTGAaATTtTaG	352
Seq_ID_15	AcaTaGcCAtaTaTaAAGGtaTgCGGttctGATGgcgtTtgttctgatgtTGAaATTtTaG	353
Seq_ID_4	AcaTaGcCAtaTaTaAAGGtaTgCGGttctGATGgcgtTtgttctgatgtTGAaATTtTac	352
Seq_ID_3	AcaTGGCAtaTaTaAAGGtaTgcaGttttGcta...cTtgtAgtgaAaCTGATgCtTtTaG	352
Seq_ID_10	gaGTGGCtgcaTAtAAaGtaTgtTGGGctGgAG...GatgttTtagcagcGACaTAcTaG	892
Seq_ID_5	gaaTaGcCgctTACAAGatTTGcTGGaAAaAtG...GctgttTtaatTCTGATATatTGG	781
Seq_ID_8	gaaTaGcCgctTACAAGatTTGcTGGaAAaAtG...GctgttTtaatTCTGATATatTGG	781
Seq_ID_16	gaaTaGCAGctTAtAAGatcTgtTGGaAAacAG...GgtgttTtgatTCTGATATTtTaG	804
Seq_ID_13	.....	0
Seq_ID_12	AcagaGtttgcTggcctcCaaTtatGGgcagtG...GgtgctTtgatTCaGATATctTGG	435
Seq_ID_9	gTtgacCctgGTtgggtttaTgacataggGgcGcagGattAcTtcgAatTccTATgCaca	104
Seq_ID_6	ActatGCagctTgaActaCacaGaGaaAgaAatgaaacttttcacgAaCgagTcaaaTcc	147
Consensus	a atagc ta aaggtatg gg ga g g tggt t at ctgatatttt g	

Conserved Region B

Seq_ID_17	CTGCAATTGATCAGGCAATTGAGGATGGAGT..GGATATAATATCCTTATCATTAGGCAT	876
Seq_ID_7	CTGCAATTGATCAaGCAATTacaGATGGTGT..GGATgTctTATCCTTgTCgTTAGGCAT	427
Seq_ID_11	CTGCAATgGATCAGGCAATTGcGGATGGttg..tGATATctTATCCTTgTCATTtGGCgc	650
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Seq_ID_4	CTGCgATgGATgtaGctATTGatGATGGcGT..aGATATtcTATCaaTATCccTtGGtgg	410
Seq_ID_3	CTGCcATgGATgcaGctATaGatGATGGTGT..aGATATcAttTCCgcATCtcTAGGCgg	410
Seq_ID_10	CaGggATgGATCAGGCcgTcataGATGGTGT..aaATgTAcTcTCacTgTCccTtGGtgg	950
Seq_ID_5	CTGCCATgGATCAaGctgTTGatGATGGTGT..GcATgTgATcTCacTtTctgTtGGggc	839
Seq_ID_8	CTGCCATgGATCAaGctgTTGatGATGGTGT..GcATgTgATcTCacTtTctgTtGGggc	839
Seq_ID_16	CTGCAATgGATCAaGctgTTGctGATGGAGT..tcAcgTgAttTCtcTtTCcgTtGGCgc	862
Seq_ID_13	.....	0
Seq_ID_12	tTGcTtTTGATtTGGtAATTGatGATGGcGT..GGAcgTgcTtTCagTcTCacTtGGagg	493
Seq_ID_9	CaaCAAcTcAgCccttcAcaGetaAcaGttTttGGAAAgttcttcCaacAgaAcTtGcCAT	164
Seq_ID_6	tTGcTcggGtTttactggaTctccActtgaTcttaActatccATCacTtTctgTtatgtT	207
Consensus	ctgc atggatc agc attgatgatgg gt gat t t tca t tc ttgg g	
Seq_ID_17	AGATGATC...TTGCTTTATATG.....AGGATCCGGTAGCTATTGCCACATTTGCA	925
Seq_ID_7	AGAcGcga...TTcCacTAcAcG.....AaGATCCtGTgGCaATTGCCgCATTTGct	476
Seq_ID_11	AGtTtcTccatTccCTcTATATa.....taGATCCtaTctCTATTGcttCATTTtCt	702
Seq_ID_14	AacTagTaa...TcCgTTccATa.....AtGAcAaGaTtGCTcTTGgggCgTaTagt	459
Seq_ID_15	AacTagTaa...TcCgTTccATa.....AtGAcAaGaTtGCTcTTGgggCgTaTagt	460
Seq_ID_4	AacTagTaa...TcCgTTccATa.....AtGAcAaGaTtGCTcTTGgggCgTaTagt	459
Seq_ID_3	AttTAcTaacgcTcCaTTAcATG.....AtGAcCCtaTtTcTcTTGgCgCgTacagt	462
Seq_ID_10	cacaatTtc...TGaTTatTAcA.....gGGATataGTAGCaATTGgaggATTTtCt	999
Seq_ID_5	taAcGgTtatgcTcCacatTATctgt....AtGATtCtaTtGCaATTGgagCtTTTGgt	894
Seq_ID_8	taAcGgTtatgcTcCacatTATctgt....AtGATtCtaTtGCaATTGgagCtTTTGgt	894
Seq_ID_16	tGAcGgTtatgcacCggaATATgatg.....cGGATtCtaTtGCTATTGgagCtTTTGgt	917
Seq_ID_13	.....	0
Seq_ID_12	AGATacTg.....gagcATATGtca....AtGActCtGTAGCTATTGgttCATTTcat	542
Seq_ID_9	cacTcgctt.gcTaaTccAgggGact....tGaActaccccGcCATtTctgCAGTTttt	218
Seq_ID_6	caggccTgattcctCTgTtCATGttgttaagAGGAcattaacaCatgTcgCggtTTctaA	267
Consensus	aa t t a tcc t at a ga ctat gctattgg gc ttt t	
Seq_ID_17	GCAATGGAGAAAGATATATTTGTTTCCACTTCAGCTGGAAATGAAGGGCCTGACGATCAG	985
Seq_ID_7	GCAATGGAGAAAGgTATATTTGTTTCCACcTcTGCaGGAAATGAAGGGCCTtAttATgAG	536
Seq_ID_11	GCAATGGAGAAAGgcATATTTGTTTCCgtTTCAGCTGGAAATGAAGGGCCTtCGATCAa	762
Seq_ID_14	GCAacaGAaAgAGgTATtcTTGTtagttgTTCtGCaGGcAATagtGGtCCattCcAaCgc	519
Seq_ID_15	GCAAcAGaaAgAGgTATtcTTGTtagttgTTCtGCaGGcAATagtGGtCCattCcAaCgc	520
Seq_ID_4	GCAAcAGaaAgAGgTATtcTTGTtagttgTTCtGCaGGcAATagtGGtCCattCcAaCgc	519
Seq_ID_3	GCAAcAGaaAAAGgTATtcTnGcTagtgCcTCTGCaGGcAATagcGa...gtttGATaAc	519
Seq_ID_10	GCAGcttctcAAGGaATcTTcGTcTCgtgcTCgGCTGGgAATGgcGGGCCaGcCtcTgga	1059
Seq_ID_5	GCActcGAacAtGgcgTccTcGTcTCatgTTCAGCTGGAAATtctGGtCCcGgaGcTtAt	954
Seq_ID_8	GCActcGAacAtGgcgTccTcGTcTCatgTTCAGCTGGAAATtctGGtCCcGgaGcTtAt	954
Seq_ID_16	GCTtcaGAacAtGgcgTtgTTGtTcTctgTcTcTCTGGAAActccGGtCCcGgtGcTtcc	977
Seq_ID_13	.....	0
Seq_ID_12	GttgTtaAGcAcGgcATTgTTGTcggtACcTCTGCTGGtAAactcgtcctggtcCcggtAc	602
Seq_ID_9	cCtgaGA.cgcaAaAgTtTcaacgCtgacgCttCacagAACagtcacCaatgtGggttc	277
Seq_ID_6	GCctgaGgtgtAcAaAgtaaaGaTaCtgaaTCTGaattctgaaAAGGttagttaaAgTAt	327
Consensus	gca c ga aagg att ttgtt ct tctgc gg aat gg cc t at a	

Seq_ID_17	GCTTTGCACAACGGAACACCTTGGGTCTCTAACTGTTGCTGCTGGCACAGTTGATCGCGAA	1045
Seq_ID_7	aCTTTGCACAAtGGAACACCTTGGGTgtTAACTGTTGCaGCTGGCACAGTTGAcCGCGAA	596
Seq_ID_11	tCTTTGagCAAtGaggCACCTTGGtTTCTctCTGTTGCTGCTaGCACAGTTGATCGgGAc	822
Seq_ID_14	aCTgTagACAAtGacgCcCCTTGGaTTCTcACaGTTGgcGCTaGCACtcaTGATaGaaAA	579
Seq_ID_15	aCTgTagACAAtGacgCcCCTTGGaTTCTcACaGTTGgcGCTaGCACtcaTGATaGaaAA	580
Seq_ID_4	aCTgTaaACAAtGacgCcCCTTGGaTTCTcACaGTTGgcGCTaGCACtcaTGATaGaaAA	579
Seq_ID_3	cCTgTagcaAAtaatgCcCCTTGGaTTCTcACaGTTGgcGCTaGCACccaTGATaGaaAA	579
Seq_ID_10	tCccTctcCAACGctgCACCaTGGaTaactACTGTaGgTGCgGGgACcaTgGAcCGCGAA	1119
Seq_ID_5	aCggcagtgAACattgCcCCgTGGaTgCTcACTGTTGgTGCatcaACtaTaGATCGtGAg	1014
Seq_ID_8	aCggcagtgAACattgCcCCgTGGaTgCTcACTGTTGgTGCatcaACtaTaGATCGtGAg	1014
Seq_ID_16	aCgcgGgtCAACGttgCgCCgTGGaTTCTcACcGTTGCTGCTtcaACgaTaGacCGgGAg	1037
Seq_ID_13	.....	0
Seq_ID_12	aaTacGaAaAA.attgCACCTTGGcTcaTAACTGTTGgcGCgaGaACtaTgGATtGtcAg	661
Seq_ID_9	tCcaatatCAAattACCAtgTTaGagTCTcgCcGTTcaaaggtGCagtcgTGAagGttgA	337
Seq_ID_6	aagcccaAtggaGctgatgtTcaatgaaTcttTaagGaaaCaaaggtAataTGgTCA..AA	385
Consensus	act t caa g gc ccttggattctcactgttgg gct gcac ttgatcg aa	
Seq_ID_17	TTTATCGGGACACTAAGTCTGGGTAATGGAGTTTCAGTCACTGGTTTATCTCTCTACC..	1103
Seq_ID_7	TTTATtGGaACAtTAActCTtGGaAATGGAGTTTCAGTCCcTGTTTATCgCTaTACC..	654
Seq_ID_11	gTTATCaGGAtAtTAActCTtGGTAATGGAGTTTCAGTCACTGGTTTATCTCTCTACC..	880
Seq_ID_14	cTaAagGccActgTtAagCTtGGaAATaaAGaagaAtTtgaaGGagaATCTgctTatCat	639
Seq_ID_15	cTaAagGccActgTtAagCTtGGaAATaaAGaagaAtTtgaaGGagaATCTgctTatCat	640
Seq_ID_4	cTaAagGccActgTtAagCTtGGaAATaaAGaagaAtTtgaaGGagaATCTgctTatCat	639
Seq_ID_3	cTaAaaGccACcgTtAagCTtGGaAATaaAGaggaAtTtgaaGGagaATCTgctgAtCag	639
Seq_ID_10	TTcccaGcatataTtAGcCTtGGaAATGGAAAAaAtTCAGTGGagTATCaCtTACagt	1179
Seq_ID_5	TTcccgGcagatgTtAtTtTaGGagATAatagaatAtTtggTGGTgTtTCatTgTACTcc	1074
Seq_ID_8	TTcccgGcagatgTtAtTtTaGGagATAatagaatAtTtggTGGTgTtTCatTgTACTcc	1074
Seq_ID_16	TTTccgGctgatgTtAtTtTaGGagATGgcagaatAtTCggTGGcgTATCCctgTattcc	1097
Seq_ID_13	.....	0
Seq_ID_12	TTTccCaGctataTcAtTtTaGGaAAcaaAaagcagtaCAaTt.TgaAaCaCTgccCaaa	720
Seq_ID_9	gccATCaagAttgaaAttTCaccagcAaacAccagaAactAtccttacaAggTgatTttCga	397
Seq_ID_6	TTTgagaGccatCatAtatTcaacAgcaGcaggaaAaTagCTGagcaAatggcgTttgggt	445
Consensus	tt a gc a tgтта tct ggaaata a a aatt g tgg g atc t ta c	
Seq_ID_17	.CCGGGAATTCCAGTTCAAGCGAAAGCTCCATCGTTTTTCTCAAGAC...ATGCCTAGA	1158
Seq_ID_7	.CtGGGAATTCTAGTTCAAGCGAAAGCTCCcTtGTcTaTgTCgA.....ATGCCaAGA	706
Seq_ID_11	.CtGGGAATTCTa...CAAGCGAtAttTCTgTtaTTcTTgTCAAGAA...tTGCTTAGA	932
Seq_ID_14	cCaaaGAcTTCaAacTCAAcattcttCaCtcTatTTGaTgTtgAaAa...gATagtagcac	696
Seq_ID_15	cCaaaGAcTTCaAacTCAAcattcttCaCtcTatTTGaTgTtgAaAa...gATagtagcac	697
Seq_ID_4	cCaaaGAcTTCaAGcTCAAcattcttCaCtcTatTTGaTgTtgAaAa...gATGtagcac	697
Seq_ID_3	cCaaaGAcTTCCAacTCAAcattcAtCgCtcTatTTGaTgctggaAa...gAatgCaAGt	696
Seq_ID_10	ggaaaagcaTtaccTagttctGtgAtgcCacTgTgTaTgctggaA...ATGCCagcc	1234
Seq_ID_5	ggCaatccTTtgAccgatgcCaAAttgcCggTgGTTTaTtcCggcgac..tgTGtagcA	1132
Seq_ID_8	ggCaatccTTtgAccgatgcCaAAttgcCggTgGTTTaTtcCggcgac..tgTGtagcA	1132
Seq_ID_16	ggCGatccgctCgGggattcaaAgctacCtcTtGTTactcCggtgac..tgcGggagtc	1155
Seq_ID_13	.....	0
Seq_ID_12	tgCatGttcTtCccTattAtaaAtgttgTctcaGcaaaagctccccatgcttcaaCTgac	780
Seq_ID_9	gaCaaaAataTCgtcaaaaAGCacgtGaatttgggaTcccTgctttGgaaa.gATGggacac	456
Seq_ID_6	tCgatatcTTgggagagtgaAaAgcaCaatgTtaggagcCcCtttgCtggtATGtggtt	505
Consensus	c aagacttc a aac a t ct t tt atgc g a atgg a	

Seq_ID_17	GGAGAAGGAACCTGGAGAAAAATGCACA..CAAATTCGCAGTCTGCTATGACAC.....	1209
Seq_ID_7	tgacaAGGAACCTGcAGAAAAATGCACA..CAAATTTgttGTCTGtctcGACaA.....	757
Seq_ID_11	taAGcAGGAATTGcAaaAtgtTaCagA..CAAATTTgtgGTCTGcAtTGACaA.....	983
Seq_ID_14	GagcAAccAgtaGccccctttcTGCAtAc.CAGgaTCaCtcaCTGacccttCt.....	747
Seq_ID_15	GagcAAccAgtaGccccctttcTGCAtAc.CAGgaTCaCtcaCTGacccttCt.....	748
Seq_ID_4	GagcAAccAg.aGccccctttcTGCAtAc.CAGgaTCaCtcaCTGacccttCtataagggg	755
Seq_ID_3	GatcAAGatg...ctccAttcTGtAgAt.CgtgggCGatGaCTGaTcctgCtatcaaagg	752
Seq_ID_10	aagcAtcaAA.TGGcaAtttATGCACA....AgTgGtAGTCTGaTtccAgAaaaagttg	1288
Seq_ID_5	aatactGttAtccagGAAAgcTagAtcc.tAAAAaaGtcGcagGaaAaattgttt....	1186
Seq_ID_8	aatactGttAtccagGAAAgcTagAtcc.tAAAAaaGtcGcagGaaAaattgttt....	1186
Seq_ID_16	aactctGttAtccagGAAtgcTGgAtcc.ttcAaagGtAGcGgGaaAaattgtat....	1209
Seq_ID_13	.....	0
Seq_ID_12	GatGctctctttatGcaAAgctgGggCAT.tggAccCaaAGaagGtaAaGgtAacta....	835
Seq_ID_9	acAaAgTGagaaGcAcAAAttgTGatCac.atggcTaGCAtcaattTAGttCAGcttg...	512
Seq_ID_6	cagcAAaattttcaataAcAgtaGattAtaCAAAATaaCtttaaTatgtacAttgtgtgtatc	565
Consensus	a aa a t g aat tg a a ca a t g g ctga c	
Seq_ID_17	.....GAACGGATCAGTAAGTGACCAATGTACAAT.G	1241
Seq_ID_7	.....GAAtGatTCgGTTgGTGAgCATgTGTACAAT.G	789
Seq_ID_11	.....aAACGcATtgGTcGgGaaCAAGTtgAaAgT.G	1015
Seq_ID_14	.....	747
Seq_ID_15	.....	748
Seq_ID_4	aaagatagttgtgtgcttggttggttggtggCGttcgtacggtTGAtaAAggacAagtT.G	814
Seq_ID_3	taagatagtccttggtgtcaaaaagaccacaAgtaGtctcaccAGTagtCAAGgacgaAAT.G	811
Seq_ID_10	atgggaaaaattgtagtatgtgacagagGgAtGaATgcaaggGcacagAAggGTTtggTtG	1348
Seq_ID_5	.....tatgcatagggGAGggcaAcgctaggGTtgaaAAAGGgAggtgcgG	1231
Seq_ID_8	.....tatgcatagggGAGggcaAcgctaggGTtgaaAAAGGgAggtgcgG	1231
Seq_ID_16	.....tatgtgatcgagGcggcaATgctagAGTagagAAAGGaAggtgcaG	1254
Seq_ID_13	.....gAcagAaTtgaaAAAGGacaAgctG	25
Seq_ID_12	.....tttttagtttgtctaagagGAgataATacGaggGTTgaCAAGgGacagcaaG	886
Seq_ID_9	.....ccatttagtaactagcattttGttTgctgAgGatAatAAAAaacatgTtG	562
Seq_ID_6	tgttgtatcgtcgtacctctagcctccGAGtatgTactatgtTGtattAcgtacCctcTaG	625
Consensus	ga t c ggt a aa gg t g	
Seq_ID_17	TAAAAAACACAAAAGTTGCTGGTGGCATCTTCATAACAAATTAC.....ACTGACTTGG	1295
Seq_ID_7	TAAgAAAttcAAAAGTTGCTGGGgGctgTCTTtATAActAATaca.....ACTGACTTGG	843
Seq_ID_11	TgAgAcAttCAAAtGcTGCTGGTGctgTCTTCATAACAAATgActttgtcACTGACTTGG	1075
Seq_ID_14	.....	747
Seq_ID_15	.....	748
Seq_ID_4	TAAAggAtgCtggAGgTGtTGGcatgATtctTtATcAatAATccagaagatggTGttacta	874
Seq_ID_3	TAAAggACgCtggAGgcGtTGGcatgATtctCATcAatAATccggaagatggTGtCacta	871
Seq_ID_10	TcAAAgAtgCtggGgaaataGGgatgATtTTggcAAacAcagAcTcttacggaGAtgaGt	1408
Seq_ID_5	TgAAgCAGgCAGgcGgaGtaGGgatgATacTtgctAatttggctgactccggcGAagaac	1291
Seq_ID_8	TgAAgCAGgCAGgcGgaGtaGGgatgATacTtgctAatttggctgactccggcGAagaac	1291
Seq_ID_16	TgAAAtttagCcggcGgTGcAGGTatggTCcTggcgAatttagctgactccggcGAagaac	1314
Seq_ID_13	TAAAgAACgCtggAGgcGtTGGcatgATtctCATcAatcggcttcaggacggTtcaacta	85
Seq_ID_12	ctgctttggCAGgtGcaGtTGGaacgATtctTagccAacgATTAtgcatctggcGATgaaa	946
Seq_ID_9	cggcAAAgTcCctgtgtTttTcagcagTgTTttcAgTAgAaaAtagtttcttTtgtTcat	622
Seq_ID_6	c.....CtCtgAgtaTGtactatGttgtaTCATcgtAccTctagcctccgagtAtgTac	679
Consensus	t aa a gc gg gg gttgg a gat t aa cgg ga	

Seq_ID_17	AATTCTACCTCCAAAGC..GAATTCCTCCGGCTGTGTTTTTGAACTTTGAAGATGGTGATAA	1353
Seq_ID_7	AATTCTACCTCCAAAGC..GAATTCCTCG.....	869
Seq_ID_11	gcgaaTACCTCaAAAcA..GAATTCCTCATCTGTGTTTcTGAATTTccAAaATGGTGATcA	1133
Seq_ID_14	.....	747
Seq_ID_15	.....	748
Seq_ID_4	AATcagctgaagctcat..GtccTtCCaGCaTgGatGtTtcagaTgcAGATGGaaAgAA	932
Seq_ID_3	AATcagctactgctcat..GttcTtCCcGCatTagaTgTttcacaTGAAGaAGGaGAgAA	929
Seq_ID_10	tggTtgctgatgcnat..ctcaTaCCaaCaGgtgcagTtggTcaaaactGcTGGTGAntt	1466
Seq_ID_5	tcgTCgcCgattcAcat..cttcTCCCGGCgacGaTggTcggTcaaaaAAGcTGGaGAcAA	1349
Seq_ID_8	tcgTCgcCgattcAcat..cttcTCCCGGCgacGaTggTcggTcaaaaAAGcTGGaGAcAA	1349
Seq_ID_16	tcgTCgcCgattcAcat..cttcTaCCCGGCgacaaTggTcggTcaaaaAAGccGGTGAcgA	1372
Seq_ID_13	AATcagcCgatgctcat..GtccTtCCCGGCcCTGgaTgTttcaTTTtttGATGGattTcA	143
Seq_ID_12	ttTTtgctgattctctCtcGtcTTACCTGCTacGcaaaTtAgtTacactGATGGactTgA	1006
Seq_ID_9	tAcTagctacttAtAtt..GccaaattattTGTGgcagctA.CTaaaATGATGaattTgg	679
Seq_ID_6	tAcgtTgtaTtaCGtaCctctAgcCtCtGagtatgTacTatgtTgTatcaAcGtaccTct	739
Consensus	t gc t c cat gt t cc gc g gt a gatgga a a	
Seq_ID_17	AGTTTTGGAGTACATCAAGAATAGCCATTTCACCAAAAGCAAGGCTTGAATTTCAAGTGAC	1413
Seq_ID_7	.....	869
Seq_ID_11	AGTTTTGAAaTatgTtAAcAgcActtcTTCACCAAAAGCAAAaGaTTGgAcTTCaAggGAC	1193
Seq_ID_14	.....	747
Seq_ID_15	.....	748
Seq_ID_4	AaTtTtGccTACATaAAActcaAcgtcgaatCCTgttGctgcaaTcaccTtCAtGgaAC	992
Seq_ID_3	AaTTaaGGccTAtATaAAAttcaActtcaaatCCTAttGctgcaaTTacATTcCAGGgaAC	989
Seq_ID_10	gaTcnaaagGTACATtgcttcTgaCagTaatCCAAttaCcAcaaTTGcATTTggAGgtAC	1526
Seq_ID_5	AaTaagacAcTACgTaAcGtcTgatCcTTCACCCAcgGCgAcGaTcGtgTtcagAGgaAC	1409
Seq_ID_8	AaTaagacAcTACgTaAcGtcTgatCcTTCACCCAcgGCgAcGaTcGtgTtcagAGgaAC	1409
Seq_ID_16	AaTaagGGAtTACgTCAAAatcTgattcaTCAACCAAAAGCgAcGaTTGttTtcaAAGgaAC	1432
Seq_ID_13	AaTTactGAGTAtATgAAatcaAcaaAgaatCCTgttGctAGaaTTacATTcCAAGgaAC	203
Seq_ID_12	Act.....CtTtAgttcaAcaagTatACCTAcAGCttccaTTacAcaTcCAacGAC	1057
Seq_ID_9	caaTagGagccAaAaaAaaAaaAaaagggCggCgcg.....	716
Seq_ID_6	AGccTccGAGTAtgTagtatgTatatcaTtg..tAtctttAGGCcTcAaaaaaAaaaaAa	797
Consensus	aat ta t a tc a cc a gc a att tt agg ac	
Seq_ID_17	ACATCTTGGTGCTAAA...CCAGCACCAAAAGTTGCTAGCTATAGCTCAAGGGGACCATC	1470
Seq_ID_7	.....	869
Seq_ID_11	ACTaaTTGGTGtgcgAA...CgAGCACCAgctGTcGCgcatTtTAGtTCgAGGGGGCCATC	1250
Seq_ID_14	.....	747
Seq_ID_15	.....	748
Seq_ID_4	tgtactTTGGaGaTAAA...aatGCTCCTAtAGTTGCTtcaTtTtctTctcGaGGACCAag	1049
Seq_ID_3	AgtaaTaGGaGaTAAA...aatGCTCCTAttGTTGCTtcaTtTtctgCtcGaGGACCAag	1046
Seq_ID_10	caAgtTgGGcGtccAA...CCAtCACCGgtcGTcGCagctTtTAGtTCcAGaGGGcCCAaa	1583
Seq_ID_5	AgtgaTcGGaaaatcAccggCAGCACCAcgtGTaGCggcgTtctcgagccGaGGACCTaa	1469
Seq_ID_8	AgtgaTcGGaaaatcAccggCAGCACCAcgtGTaGCggcgTtctcgagccGaGGACCTaa	1469
Seq_ID_16	tgtaaTcGGaaaatcAccgtCtGCTCCAcgtaTTGCTgcgTtctcaggccGaGGACCCaa	1492
Seq_ID_13	gataaTaGGcGaTAAA...aatGCTCCAgTgcTTGCTgGtTtTtcaTCTcGcGGACCAag	260
Seq_ID_12	t.taATTGGgaacAAA..gCCAGCTCCAgTcaTaGCagcCTtTtcaTCAAtaGGACCTaa	1114
Seq_ID_9	.....	716
Seq_ID_6	AaAaaaaaaaaaAAA.....	813
Consensus	t at gg a aa gc cc t gc tt g ggacc a	

Seq_ID_17	AGAAAGCTGCCCTTTTATCCTCAAACCTGACCTGATGGCTCCTGGAGCCTTAATATTAGC	1530
Seq_ID_7	.....	869
Seq_ID_11	AatgAcCTGCCCGTTTATCCTCAAACCTGACCTGATGGCTCCaGGtcaCTTAATAcTAGC	1310
Seq_ID_14	.....A.....	748
Seq_ID_15	.....	748
Seq_ID_4	cGAAGcaaGtCgTggcATCtTgAAACCTGAtaTtATtGgTCCTGGtGttaatgTccTtGC	1109
Seq_ID_3	ccgAgcaaaCCCTggcATCtTaAAACCTGAtaTtATtGgTCCTGGtGttaatATccTtGC	1106
Seq_ID_10	cccAAtCacaCCggagATCCTtAAACCaGAttTGATaGCaCCaGGtGtCaatATtCtTtGC	1643
Seq_ID_5	tcAtttgacgCCggagATtCtTtAAACCGGAtgTtATtGCaCCTGGAGttaacATtTTgGC	1529
Seq_ID_8	tcAtttgacgCCggagATtCtTtAAACCGGAtgTtATtGCaCCTGGAGttaacATtTTgGC	1529
Seq_ID_16	ttAtgtaacaCCggagATCCTtAAACCGGAtgTtActGCaCCaGGAGtCaacATATTAGC	1552
Seq_ID_13	cacAgctaGtCCTggaATCtTgAAACCTGAtaTtATtGgTCCTGGtGttaatgTccTAGC	320
Seq_ID_12	cactgttacaCtggagATCCTtAAggtT..ttacgcaGgTtCatGAtttTTtgacacgaC	1172
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	a cc g atc t aaacc gat t at g cc gg gt t t gc	
Seq_ID_17	CTCATGGCCTCAAAAATCACCGGCAACTCAAATTCGCTCAGGAGAGCTTTTCAGTAACCTT	1590
Seq_ID_7	.....	869
Seq_ID_11	tTCATGGtCTCcActATCATCtGtgAgTCcAtaT.....actGAaCTTcaCAaTAtCCTT	1364
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	tgCtTGGCCTacctcAgtAgataaac...aAcAaa.....aAcacaaaatccAcaTT	1157
Seq_ID_3	tgCtTGGCCTaccAccgtgaatatccCcaAcAaa.....aAcacaaatccTggaTT	1157
Seq_ID_10	tggcTGGaCaggAAAgttggacCAACaggttTgCcagaAGacaccaggaatgtgggtTT	1703
Seq_ID_5	CggtTGGaCcggAtctgttggacCgACcgAttTggatattGacacGagaagagtagAaTT	1589
Seq_ID_8	CggtTGGaCcggAtctgttggacCgACcgAttTggatattGacacGagaagagtagAaTT	1589
Seq_ID_16	CggtTGGaCcgggtccatAggacCAACagAttTggaaattGataccagacgagtggaAaTT	1612
Seq_ID_13	agCtTGGCCTacttctgtcgaa..AAC.....aaaaCcaacaccaaaTcaAc...aTT	368
Seq_ID_12	aTCTtTtCtTgAAAgaTCAGgaaacgacatctTTtctTgAagatcaggaacCtt.gAagT	1231
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	tgg c a a tt	
Seq_ID_17	CAACATCATATCAGGTACGTCAATGTTCATGCCCTCATGCAGCTGGTGTAGCAGCACTTCT	1650
Seq_ID_7	.....	869
Seq_ID_11	tAACATtATATCtGGcACaTCcATGTCATGtCCaCacGctGCCGGTGTAGctGCACCTgT	1424
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	CAAtATCATATCAGGcACaTCAATGTCTTGCCCTCA.....	1193
Seq_ID_3	CAAtATCATATCAGGcACaTCAATGTCTTGCCCTCA.....	1193
Seq_ID_10	CAACATCATcTCtGGaActTCcATGTTCATGtCncCATGtAagTGGgcTtGCAGCAnTaCT	1763
Seq_ID_5	CAAtATtATtTCtGGaActTCcATGTCTGTCCTCAcGttGggGGatTgGCTGCTtTaCT	1649
Seq_ID_8	CAAtATtATtTCtGGaActTCcATGTCTGTCCTCAcGttGggGGatTgGCTGCTtTaCT	1649
Seq_ID_16	CAACATtATATCtGGTACaTCcATGTCTTgTCCTCATGttagcGGgtTAGctGCTtTaCT	1672
Seq_ID_13	CAACATaATtTCcGGTACcTCTATGTCATGtCCTCAccttagcGGaGtTGCAGCATTgtT	428
Seq_ID_12	CtgaAgaAgcTatGcTtgaagAATaTgcgGagCaagTtgAagcacaATatagttttTgtT	1291
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	caa at at tc gg ac tc atgtc tg cc ca t t t	

Seq_ID_17	GAAAGGAGCACACCCCAAATGGAGTCCTGCTGCCATCCGGTCGGCCATGATGACCACAGC	1710
Seq_ID_7	.....	869
Seq_ID_11	tAAAGGgaCcCACCTgAATGGAGcCCaGCTGCCATtCGtTCGGCCATGATGACTACAGC	1484
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	GnAAGccGCCaTCCagAATGGAGTtnaGggGtnATaaGGTCaGCacTGATGACTACAGg	1823
Seq_ID_5	tAgAaGgGCCcACCCaAAgTGGAccCCaGCaGCggTaaaGTCaGCacTtATGACaACAGC	1709
Seq_ID_8	tAgAaGgGCCcACCCaAAgTGGAccCCaGCaGCggTaaaGTCaGCacTtATGACaACAGC	1709
Seq_ID_16	tAgAaaAGCttACCCTAAATGGAccaCaGCaGCCATCaaaTCtGCCcTcATGACaACAGC	1732
Seq_ID_13	aAAAaGcGcGcCACCCtActTGGtcccCTGCaGCTAtTaaaTCaGCaATcATGACaACcGC	488
Seq_ID_12	ctgttagtagCAgtttAAAgatttTgtcatTtgtAcatcGTgtatagTtcTaAtgtCtGt	1351
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	a t t t a c g	
Seq_ID_17	CGACACGATGGATAACATGCAAATGCCCATCCGAGACATAGGTCGC...AACATAATGC	1767
Seq_ID_7	.....	869
Seq_ID_11	gGatgttcTaGAcAACAcAaAAAgTCCgATCCaAGACATcGGTCGtccagAgAATgcTGC	1544
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	ttACAgcAcacAcAAGAatggnaaatgATagagGAt...GTtGCCacAggAATgtcat	1879
Seq_ID_5	ttACAactTGGAcAAttctgggtAaagtatTtacAGAtcTtGccactggccAagA.....	1763
Seq_ID_8	ttACAactTGGAcAAttctgggtAaagtatTtacAGAtcTtGccactggccAagA.....	1763
Seq_ID_16	ttACAacgTtGATAACtccggcAaaaCCtTtacAGAtcTcGcgacaggccAggA.....	1786
Seq_ID_13	tGAtACagTcaAcctCgccaAcAatCCCATattAGAtgaAatgCtCcgtcctg.....	541
Seq_ID_12	ttttA...GGAgttgATaaAAATagtgcatGcaAttTgctTaGgtatAtttATtgaca	1407
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	a a	
Seq_ID_17	TGCCAGTCCCCTAGCCATGGGAGCTGGCCGTATCAATCCAAATAAGGCACTAGACCCTGG	1827
Seq_ID_7	.....	869
Seq_ID_11	TGCTAcTCCtCTtGCTATGGGAGCTGGCCaTATCAATCCtAAcAAGGCAaTAGAtCCTGG	1604
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	a..tAcaCCagTtGatcatGGcGCTGGaCaTgTgAATCCAgcagcaGCTaTgaAtCCTGG	1937
Seq_ID_5	atCtAcTCCtTcGttcatGGAtCaGGtCaTgTagAcCCgAAccgaGCAtTgGATCCgGG	1823
Seq_ID_8	atCtAcTCCtTcGttcatGGAtCaGGtCaTgTagAcCCgAAccgaGCAtTgGATCCgGG	1823
Seq_ID_16	atCgAGTCCgtTtGttcacGGgtCgGGtCaTgTggATCCgAAcAgaGCACTAGAtCCaGG	1846
Seq_ID_13	..CaAacatCtTtGCCATtGGtGCaGGaCaTgTCAATCCAtcacgaGCAaatGATCCaGG	599
Seq_ID_12	TtgtgaTCCttcgGtttTttataaTGaaCaatgaAATtttgtggAaaaaAaaAaaaaaa	1467
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	g g c a a	

Seq_ID_17	ACTTATCTATGACATTACATCACAGGACTATATCAATCTCCTCTGTGCTCTAGATTTTAC	1887
Seq_ID_7	.....	869
Seq_ID_11	ACTcATCTATGAtAcaACaCCACAaGAtTAcATtAAATCTtCTtTGTGCTCTAaATcTcAC	1664
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	gtTagngTATGAtcTcACAgttgAtGACTATATaAActTCCTtTGcGCCcTgGATTacAg	1997
Seq_ID_5	ttTgATtTAcGACATcgaAaCtagcGATAcgTaAAATtTCCTaTGctCcaTgGcTTaTga	1883
Seq_ID_8	ttTgATtTAcGACATcgaAaCtagcGATAcgTaAAATtTCCTaTGctCcaTtGgcTaTga	1883
Seq_ID_16	tCTTgTCTAcGATATTgacaCgaAGGATAcgTggATtTttTaTGcGCCaTtGgTTaTga	1906
Seq_ID_13	ACTagTtTAcGATAcacaATTcaAGGATAcATatcTtattTaTGTGgTtTgaAaTAcAC	659
Seq_ID_12	AaaaAaaaAaaAaA.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	a a	
Seq_ID_17	ATCTCAACAGATAAAAGCCATTACAAGGTCCTCTGCTTATTCTGTTCCTCAACTCATCATT	1947
Seq_ID_7	.....	869
Seq_ID_11	ATCcgAgCAGATAAAAaCCATcACTAGGTCCT...CTTATaCtTGccCCAACcCATCATT	1721
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	tcCaagtatGATcAAgGtCATcgCAAAgCgagaTatTTccTgCgnaaaCAataaggataT	2057
Seq_ID_5	cggcgAcgAtgTcgccGtgtTcgCgAGagatTCTtCTcgagtgaaTTgCagtgaAcgAag	1943
Seq_ID_8	cggcgAcgAtgTcgccGtgtTcgCgAGagatTCTtCTcgagtgaaTTgCagtgaAcgAag	1943
Seq_ID_16	tcCcaAAagaATttcAcCgtTcggtAaagataCTtCTTcagtgaaTTgCAGCgaAaagaa	1966
Seq_ID_13	AgaTCgACAGATgggAagCcTTctAcaacgCa.....gaaCaaGTTgCtcgaaAgtgaa	713
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		
Seq_ID_17	GGATTTAAACTATCCATCATTCATAGGCTATTTCAATTATAACAGCAGCGAGTCAGACCC	2007
Seq_ID_7	.....	869
Seq_ID_11	GGAccTAAACTATCCATCtTTCATtGcCTATTTCAAcgtgAatAGCAGCGAGTtgGAtCC	1781
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	aGAGTTg...CTgaCCtTaATTacccatCTtTTgCcATTcctttgGaAaCGgGcCtGgggC	2115
Seq_ID_5	tttggtActccgggAgaccTgAattaCccgTcgttcTccgttggttttaccggtGAgag	2003
Seq_ID_8	tttggtActccgggAgaccTgAattaCccgTcgttcTccgttggttttaccggtGAgag	2003
Seq_ID_16	tttagTtAgtccgggggatTTgAattatccaTcgttcTcagttgtatttGgcagtG....	2022
Seq_ID_13	aagTaTtcctgAagCAcaAcTCAattaCccTTcggtTTccAtttcacttGg.agca....	768
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		

Seq_ID_17	TAAAAGGATACAAGAATTCCAGAGGACGGTGA	2064
Seq_ID_7	.....	869
Seq_ID_11	TAcAAGagTACAAGAATTCaAGAGGACaGTGACTAATGTcGGAGAAG...GTgTGTCgGa	1838
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	gAAcAtGcaAatAGtAgTgCaccaacaGtgacCagATaTAcGAGgAc...tctaacaac	2172
Seq_ID_5	cAAcgGtgTggttaAATaCaAGcGGgtGGTGAaTAATGTAGGAaAAaatacagatgCTGT	2063
Seq_ID_8	cAAcgGtgTggttaAATaCaAGcGGgtGGTGAaTAATGTAGGAaAAaatacagatgCTGT	2063
Seq_ID_16	..AtAGtgTggtgaAAAACaAGcGtgtGGTtAaaAATGTtGGcaggaatacaAatgCgGT	2080
Seq_ID_13	....AatcaACAAacATaCacaAGaACaGTGACaAAcGTcGGgGAGG...caATGTCatc	821
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		
Seq_ID_17	ATATACAGCCAAATTGACCTCAATGGGTGATTATAAAGCTAGTGTGCACCTGACAAGTT	2124
Seq_ID_7	.....	869
Seq_ID_11	ATATACAGCCgAgcTGACTgCAATGccTGgactTAAAGtTAGTGTGttCCTGAaAAGTT	1898
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	gTgggaAatCcAgcTacataCAAgGccTcAgTcTcttctgAaatgcaggaagtgaAgaTT	2232
Seq_ID_5	gTATgaAGtgAAGgTGAatgCgccGtcggtggAgGtgAaTGTatCACCGGcgAAGcT	2123
Seq_ID_8	gTATgaAGtgAAGgTGAatgCgccGtcggtggAgGtgAaTGTatCACCGGcgAAGcT	2123
Seq_ID_16	gTATgagGtgAAAAaTaAatgCgccGGGTtcggtggAgGtgAagGTgaCtCCgactAAGcT	2140
Seq_ID_13	tTATcgcGtgAgaTagttTCaccacaaaATgtTcccGtTgtTGTTaagCCTtcaActcT	881
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		
Seq_ID_17	GGTTTTCAAAGAGAAGTATGAAAAGCAAAGCTACAAGCTAAGGATAGAAGGTCCATTGCT	2184
Seq_ID_7	.....	869
Seq_ID_11	GGTTTTCAAAGAcAAGTATGAAAAGCAAAGCTACAAGCTgAGGATAGAATGTCCaCaACT	1958
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	caggTTgAAccAcAAacActtActtttAgTcGgAaAg...AAGGAaAagAaaaCCTacaCT	2289
Seq_ID_5	tGTaTTCAGtGAGgAaaAgcAAAgtttgcgTATgAGaTtAGctTaaAgaGTaaAaaGag	2183
Seq_ID_8	tGTaTTCAGtGAGgAaaAgcAAAgtttgcgTATgAGaTtAGctTaaAgaGTaaAaaGag	2183
Seq_ID_16	tagTTTtAgcGAGAAaaATaAggtttgcgTATgAGaTtAGttTtagcaGtaatggaag	2200
Seq_ID_13	aaaaTTtAcgaAGttGaATcAgAAGttgAcaTACcgagTgAcatTttccacaaCAacaaa	941
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		

Seq_ID_17	AGTTGATATTATCTTG. TTTATGGTTCTTTGAGCTGGGTGGAACTAGCGGTAAATATGT	2243
Seq_ID_7	.....	869
Seq_ID_11	gaTgaATgaTtTCTTGgTTcATGGTTCTTTaAGCTGGGTGGAAAaggGaGGTAAATATGT	2018
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	gtgacATtcacTgcTagTTccaaGccaTcaGgcacaaacTaGctttgctCGactggaATGg	2349
Seq_ID_5	tGgTGATtTgcagaTGg. TgAaGGggaTTgaAtCTGcaT. . . . ttggGtcGattgaATGg	2238
Seq_ID_8	tGgTGATtTgcagaTGg. TgAaGGggaTTgaAtCTGcaT. . . . ttggGtcGattgaATGg	2238
Seq_ID_16	tGTTGggtTggagagag. TaAaaGgTCTTgaAtCaGcaT. . . . ttggGtcaattgagTGg	2255
Seq_ID_13	ca. TcAcaaacaTggaAGtTGttc. . . . AtggatacTtgAaATGg	981
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		
Seq_ID_17	TGTAAAAAGTCCCATTTGTCGCAACTA. CCATAAGAGTGGATCCTCTGTGAGGACAGAACT	2302
Seq_ID_7	.....	869
Seq_ID_11	aGtTAaggAGcCCaATTGtTGcCaCaAattcTtAagtTtGATCCTtTGacAGGAtAGtACT	2078
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....C.....	1194
Seq_ID_3	.....C.....	1194
Seq_ID_10	TcagAtggacaaCATgtTgttgctagcCCAattGctTtcAgttggacatgattatGctaa	2409
Seq_ID_5	aGTgAtggaattCAcaaTgtgAgaagcCCAattGcGgtGcgttggcGTcActAttctgaT	2298
Seq_ID_8	aGTgAtggaattCAcaaTgtgAgaagcCCAattGcGgtGcgttggcGTcActAttctgaT	2298
Seq_ID_16	aGTgAtggaattCAcAGcgtgAggagtCCAattGcGgtGcattggctactccACTctgCT	2315
Seq_ID_13	acaAgtgAtaagCATTtTgtaAgaagtCCAattGctgttATtCTacaaGAGcAtgaAACa	1041
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	C	
Seq_ID_17	GATTATGAGTCCTGTATTCTGAAAATGTGATACAGTGATGAATAATTGTGAAGTTAAATT	2362
Seq_ID_7	.....	869
Seq_ID_11	GATTActga. . . . aTATTCcactAAacatgTctttTGagaAcatgaTaTatAcaTActTg	2134
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1194
Seq_ID_3	.....	1194
Seq_ID_10	ttcTATAAGTCaTtcActTgcaAAtgTacaAgtgcaaatattcctATAaaatAaTTActag	2469
Seq_ID_5	GcagcatccatgTGagTaaTGgAtgatTGtTctttatATTgcattgcaTGgAccaAtAaa	2358
Seq_ID_8	GcagcatccatgTGagTaaTGgAtgatTGtTctttatATTgcattgcaTGgAccaAtAaa	2358
Seq_ID_16	acagAatctcagTGagcaaTGgActatgaAgcaAGAagata. attgTGctAAtcTgcAaa	2374
Seq_ID_13	ccagAaGAtTagTG. . TctTtActtTtTaATAattTGTtCaAATttaTaataAACcc. cgTa	1098
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		

Seq_ID_17	CAAAAAAAAAATCTTTTCAGTTAGTTAAAACTAACTTGCTGATTAAAAAAAAAAAAAAAAAAAA	2422
Seq_ID_7	.....	869
Seq_ID_11	tgAAgtgtAgTtcTaTggtTcAcantnnAaaAAAAAAAAAAAAA.....	2188
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1194
Seq_ID_3	.....	1194
Seq_ID_10	tgtgcAgcAgctacTcCtcTaAtaTtccACCACTaaaaaAaTAgccctgAcctAtAAtt	2529
Seq_ID_5	CtgggAtgA.TgacaaattgaAagacgAAaTgttgctagaggatcAtcgAAtttgtccAA	2417
Seq_ID_8	CtgggAtgA.TgacaaattgaAagacgAAaTgttgctagaggatcAtcgAAtttgtccAA	2417
Seq_ID_16	CtgttAtgggcCagaaacaggAacaAggctaAgtTcagaaAggAAAAggAAAtAgggAAg	2434
Seq_ID_13	ttA..AttgATtgTaTCaaaAtgTAGAAtgAgtgcaaaaATTgctcAtgttttAttctA	1156
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		
Seq_ID_17	AAA.....	2425
Seq_ID_7	.....	869
Seq_ID_11	.....	2188
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1194
Seq_ID_3	.....	1194
Seq_ID_10	AAgatgcctaggaaattctagcatctagacaaggaaaatgttggttgatttgtccagcaa	2589
Seq_ID_5	ctt.taatttcactttctttaccttttgttctctgatgttggttcagattgatgtatatat	2476
Seq_ID_8	ctt.taatttcactttctttaccttttgttctctgatgttggttcagattgatgtatatat	2476
Seq_ID_16	g...aacatctatctgttgaataatgttaagaaattttcattcattctttct...tgt	2487
Seq_ID_13	ctggtgatatttccttctgttggttaaaaaaaaaaaaaa.....	1193
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		
Seq_ID_17	....A.....	2426
Seq_ID_7	.....	869
Seq_ID_11	.....	2188
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1194
Seq_ID_3	.....	1194
Seq_ID_10	aagacAggtgttttacttgccagattattatgtaccaagccacacaatatggataaatac	2649
Seq_ID_5	gaatgAagcatacccagttgtttccagaaaaaaaaaaaaaaaaaaaaaaaaaaaaa...	2533
Seq_ID_8	gaatgAagcatacccagttgtttcacagaaaaaaaaaaaaaaaaaaaaaaaaaaaaa...	2532
Seq_ID_16	ttatgAgtattttatcag....ccacaaaaaaaaaaaaaaaaaaaaaaaaaaaaa...	2538
Seq_ID_13	.....	1193
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		

Seq_ID_17	.....	2426
Seq_ID_7	.....	869
Seq_ID_11	.....	2188
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1194
Seq_ID_3	.....	1194
Seq_ID_10	aattggctttcg	2691
Seq_ID_5	.....	2533
Seq_ID_8	.....	2532
Seq_ID_16	.....	2538
Seq_ID_13	.....	1193
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		

Figure 16B

